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Factors Influencing Teacher Collaboration in Middle School Interdisciplinary Teams

By

Duncan Alexander Anderson ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Education

Department of Elementary Education

Edmonton, Alberta
Spring, 1995

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Duncan A Anderson

Box 40, Site 2, RR #3
Ponoka, Alberta, T4J 1R3

April 11, 1995

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Factors Influencing Teacher Collaboration in Middle School Interdisciplinary Teams submitted by Duncan Alexander Anderson in partial fulfilment of the requirements for the degree of Master of Education.

Dianne Oberg
Dr. D. Oberg

Julia Ellis
Dr. J. Ellis

L. Beauchamp
Dr. L. Beauchamp

March 24, 1995

This thesis is dedicated to my friend and my wife, Elaine,
for the inspiration found in her never-ending desire to learn, her sharing of the
knowledge gained in that quest, and her encouragment of others
to follow a similar path.

Abstract

A case study was used to examine factors influencing teacher collaboration in middle school interdisciplinary teams. Collaboration related to interdisciplinary curriculum units developed by the teams was also studied.

Supporting the research literature, five main factors were found to influence collaboration: time, administrative support, in-service, personal benefits, and teacher efficacy. The study also identified school size and commonly shared space as lesser factors.

Although team members generally supported a collaborative approach and saw gain for themselves and their students, they still had questions and concerns as they developed their teams' collaborative styles.

Implications for practioners included the process of implementing change, potential pros and cons of teacher collaboration in middle school teams, and considerations for dealing with interdisciplinary curriculum units.

Further research was suggested regarding selection of collaborative team members, assessment and development of team skills, inclusion of non-team members, and extension of interdisciplinary curricular efforts.

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Chapter 1

BEGINNINGS

Introduction

Among those significant elements of educational reform emerging in the last twenty years are three that are often found closely tied together. These three are the middle school, interdisciplinary teams, and interdisciplinary curriculum. Collaboration is a major thread that links them. Collaboration offers promises such as improved collegiality, collective problem solving, and teacher efficacy, but embarking upon a collaborative course requires teachers to make personal commitment to move confidently and willingly from the private to the public, from an individual perspective to a collective viewpoint. The course is not always a smooth one. "The shift from teachers' planning in the isolation of their individual classrooms to the dynamics of group deliberation calls for change in each educator's curriculum perspective and decision making, as well as in the culture of the school" (Hawthorne, 1990, p. 279).

The purpose of this research was to examine the factors that influence teacher collaboration in interdisciplinary teams at the middle school level.

Through the process of this research, I desired to add to my personal and professional skills and to share my expanded knowledge with others who may also wish to explore the possibilities of a collaborative approach to teaching.

A Personal Inquiry

A significant number of the twenty-nine years of my teaching career have been in positions which entailed working closely with my peers. One result of that work was national recognition for establishment of a cooperative program planning and teaching model in a school library program. A related and further result was the self-directed question, "If much of my success was due to involvement in collaborative activities, what was it that made others willing to work cooperatively with me and other teachers?"

In the last ten years I have taken substantial training in cooperative learning as an instructional strategy. That knowledge has subsequently been shared in many workshops, conducted both on my own and in conjunction with others. A query arising from this knowledge and from the workshop experiences was, "How much of this applies to teachers working collaboratively?"

For the past five years I have worked in a school district that has been making the philosophical and physical transition from traditional junior high schools to middle schools. Part of the resultant restructuring has seen the emergence of interdisciplinary teams and, concurrent with that, a move towards collaborative efforts in interdisciplinary curriculum and other areas. In some schools, teams formed, functioned well and, over a period of time, demonstrated effective collaboration. At other sites, teams were slow to form, evolved much more slowly and demonstrated few, if any, noticeable collaborative efforts. Given the external pressure for a change in this direction, I wondered why some teams succeeded in collaborating where others did not.

In the last decade much has been demonstrated regarding the benefits of collaborative efforts in the business world. Were the collaborative approaches and resultant successes of those companies employing the total quality management concepts espoused by the late W. Edward Demmings and others applicable and transferable to the idea of teachers working together?

As a beginning to a search for the answers to these queries I had the opportunity in the summer of 1993 to participate in the University of Alberta's Summer Institute on Collaboration. As a student in Dr. Lillian Ben-Peretz's course, "Collaboration and Curriculum Change," I was introduced to some of the relevant research and theory. That sampling, although providing some answers, also raised more questions and eventually led me to consider the topic as a thesis focus.

Focus of the Study

It soon became clear that I would have to narrow my focus somewhat. After an examination of several emerging and potentially exciting directions in education, I chose to focus on collaboration in team planning of interdisciplinary curriculum in middle schools.

As my study progressed I realized that the parameters were too narrow and that many of the factors that were instrumental in creating and sustaining teacher collaboration during team planning of interdisciplinary curriculum were actually established outside of the planning activities themselves. In the end I decided to study teacher collaboration in middle school interdisciplinary teams and the factors that influence that collaboration. I also extended that focus to an analysis of collaboration during the planning and teaching of interdisciplinary curricular units.

Organization of the Report

This chapter has outlined the focus of the study and the why and the how of I came to that focus.

Chapter 2 begins by identifying the main elements related to the study. It then summarizes the differing perspectives of collaboration held by a number of educators and researchers. Following that, the literature on the factors influencing teacher collaboration is presented.

Chapter 3 discusses research methodology in terms of the approach used, selection of a site, data collection and analysis, and a variety of factors related to the study.

Chapter 4 is a description of the case.

Chapters 5 -10 present the findings of the study, and examine seven factors emerging from the data of the case.

Chapter 11 presents concerns of the participants, brings forth further questions that surfaced as a result of the study, and discusses implications for educators and researchers.

Chapter 12 offers a concluding view of the case and some personal reflections.

The report concludes with bibliographies and appendices.

Chapter 2

REVIEW OF THE LITERATURE

Research Focus Elements

Three significant elements of educational reform emerging in the last couple of decades, and often found linked together, were important to my topic. These three were the middle school, interdisciplinary teams, and interdisciplinary curriculum. Teachers working collaboratively was identified as a major thread that often tied these three together.

Middle schools began to emerge in North America approximately twenty years ago. At the heart of this reform movement was a belief that traditional junior high schools were too often little more than an interim step in the educational process, which neither provided an appropriate transition from elementary school to high school, nor effectively addressed the characteristics of early adolescence (Elias & Branden-Muller, 1994). What was needed, it was argued, were stable transitional schools that conscientiously took into account the emotional and physical changes that their charges were experiencing, reduced the overall change from elementary school, provided each student with a teacher advisor or mentor, and encouraged a curriculum that was thematic and student focussed.

The organization of teachers into interdisciplinary teams is regarded as one of the key elements in the success of the middle school movement (Alexander, 1981; Blomquist, Bornstein, Fink, Michaud, Oja, & Smulyan, 1986; George, 1985). A middle school interdisciplinary team is a group of teachers who share the responsibility for a common group of students, normally at the grade 6-8 or grade 7-8 level. In most instances, those teachers and students share a common space and a similar schedule. The team's responsibilities often include the planning, teaching, and evaluating of an appropriate curriculum as well as other aspects such as student behaviour and activities. As a minimum, the team is responsible for the core academic curriculum (generally Language Arts, Mathematics, Science and Social Studies).

Jacobs defined interdisciplinary curriculum, another key element of the middle school, as "a knowledge view and curriculum approach that consciously applies methodology and language from more than one discipline to examine a central theme, issue, problem, topic, or experience" (1989, p. 8). Within this and others' definitions, there are multiple levels of interpretation and application. Interdisciplinary curriculum has ranged from theme days, often with little real integration, to curriculum that is "constructivist and affect loaded" (George, Stevenson, Thomason, & Beane, 1990, p. 97). Drake reflected the feelings of the strong supporters of interdisciplinary curriculum when she stated, "Educators are being called to adventure. The catalyst may be either their critics or a sense that there are more relevant ways of educating students. Integration [an interdisciplinary approach] offers an exciting challenge" (1993, p. 8).

Collaboration, or the collective application of a group's knowledge and effort, is instrumental to the success of each of the three elements and is viewed by many as leading the way from the isolated and independent classroom structure of schools of the past to one where teaching is viewed as a truly communal effort (Arhar, Johnston & Markle, 1988; Ashton & Webb, cited in Arhar et al., 1988; Ellis, 1990; Little & Bird, 1984). Such a paradigm shift is also moving teachers and principals to the collaborative team style utilized by many other professions (Hawthorne, 1990).

Perspectives of Collaboration

Opinion varies considerably as to what actually qualifies as meaningful teacher collaboration and whether it actually happens to a significant extent. Maeroff, representative of those somewhat skeptical regarding the extent to which serious collaborative efforts have really progressed, stated, "The measure of most teachers' successes usually rests on how adept they are at working on their own. At a time when school are replete with talk about cooperative learning . . . there is no concomitant move to encourage collaboration among professionals" (1993, p. 514). In the same vein, Little has argued that "much that passes for collegiality does not add up to much" (1990, p. 505) and she has questioned the "capacity of teachers' collegial relations to accommodate the intellectual, emotional, and social demands of teaching" (1990, p. 511).

Lieberman, although a strong supporter of the potential to be uncovered in teacher collaboration, still believes that teachers currently "tend to spend most of their time deliberating about activities and content, not purposes and outcomes" (1988, p. 284). Echoing this opinion, Hawthorne's research indicated that "deliberations most likely focussed on selecting and organizing topics to address and on matters of logistics" (1990, p. 285). Similarly, Shaw concluded that much of the interaction and collaboration among team members focussed on low level concerns (1993, p. 27).

At the other end of the spectrum are those who see worthwhile teacher collaboration happening and benefiting those involved. Cohen stated that "the essence of continual professional growth lies in stimulating contact with peers who continually inform and challenge ideas about curriculum, classroom management, and larger problems of school community relations" (1981, p.

165). Arhar, Johnston, and Markle viewed collaboration as potentially all-encompassing and "consisting of such elements as cooperation among teachers, influence of teachers, interaction with colleagues, utilization of team concepts, supportive administration, positive feedback from supervisors, and outstanding faculty colleagues" (1988, p. 22).

Factors Influencing a Decision to Collaborate

There are a number of factors which appear to facilitate or inhibit collaboration. These factors are not necessarily opposites of one another. Rather they either motivate teachers to collaborate or they sustain them in maintaining a basically non-collaborative position. Reducing or eliminating inhibitors to collaboration will not necessarily bring about a move towards collaboration. Even when the evidence favours collaboration, the final decision still depends on the personal choices of those involved (George & Oldaker, 1985).

Specific "persuaders and dissuaders" (Young, 1989, p. 374) tend to involve either the structures and norms of schools or those factors which can be labelled as 'human elements.' A review of the literature indicated the following as major factors: a profession with a history of isolated work, a lack of collaborative skills, the provision of adequate time, the encouragement of superiors, and the perceived degree of personal gain for those involved.

Occupational norms that have often been in place for decades are some of the biggest factors impeding collaboration. These norms are commonly reflected in hierarchical systems which perpetuate isolated effort, provide minimal feedback, and allow for little teacher input into decisions that affect their work (Drake, 1993; Kasten, Short & Jarmin, 1989). "Teachers are now being pressed, invited, cajoled into ventures in 'collaboration,' but the organization of their daily work often gives them scant reason to do so" (Little, 1990, p. 530).

As a consequence there is a tendency to "resist the journey into the new by clinging to the old, even if it doesn't work anymore" (Drake, 1993, p. 12). Some may outwardly support or advocate collegiality, but decline or hesitate when collaborative opportunities are made available to them (Lake, 1989).

For others there is "an unwillingness to expose themselves to the criticism and censure of their colleagues" (Johnston et al., 1988, p. 28). They fear the loss of a perceived autonomy that gives them control over an individual classroom or subject, patterns of teaching, and classroom management (George, 1984).

If steps towards collaboration are contemplated, "such changes cannot be taken without attention to the resistance they are likely to meet from teachers who see little advantage in working together and who resist any attempt to make teaching a collective rather than a private function" (Kasten et al., 1989, p. 78).

Part of that resistance is rooted in a second factor, the fact that teachers frequently lack the skills in leadership, communication, trust building, problem solving, decision making, and conflict management that are necessary for successful joint work (Caldwell & Wood, 1992). "Although some might argue that teachers are skilful at school improvement, not only should a team exist, but it ought to be forged in an intense team building situation" (Maeroff, 1993, p. 514).

This kind of staff development, key to initial success, should be founded in analysis of the group's abilities and needs and focus on the development of collaborative skills that are both task and process oriented (Kessler, 1992;

Lawler, cited in Kasten, et al., 1989). "Results can only be expected when groups have carefully structured positive interdependence and periodic group processing, and members possess necessary group skills in leadership, communication, trust building, decision making, and conflict management" (Johnston, et al., 1988, p. 30).

A third factor that appears to impact significantly on the likelihood of successful collaboration is that of the provision of adequate time (Caldwell & Wood, 1992; Lake, 1989; MacIver, 1990). "Without team periods it is virtually impossible for a team of teachers to be effective. Administrators and supervisors must gear their expectations of a team's accomplishments to the number of periods available for meetings" (Merenbloom, 1986, p. 51). "Groups of people who work together need not only good ideas, but enough time to strip away the stereotypes held by people in different positions doing different kinds of work. People don't just naturally work together" (Lieberman , 1986, p. 8). In addition to advocating the provision of time for collaboration, there are those who have contended that the use of that time needs to be structured or focussed according to an organized agenda, action plan, or other device in order to provide the greatest return (Ellis, 1990).

According to the literature review, collaboration is also more likely to happen if there is clear support from superiors, especially principals. In the process of making such a change, "the principal plays a fateful role" (Sarason, 1982, p.139) and "the principal's actions serve to legitimate whether a change is taken seriously" (Fullan, 1991, p. 76). Unless the school's administration emphasize teaming and provide clear expectations and relevant support for teams, there is a strong possibility that teachers will return to their old beliefs and behaviours (Drake, 1993; Plodzik & George, 1989). "The more supportive the principal was perceived to be, the more likely staff were to perceive the use of an interaction model of curriculum planning" (Brady, 1985, p. 96).

"Like other school innovations, joint action must compete for time, energy, and other scarce resources -- with other tasks and opportunities. Whether joint action is sustained may depend on its benefits -- from the participant's point of view" (Little & Bird, 1984, p. 12). The knowledge of and the opportunity to experience those possible benefits has significant potential to attract teachers to collaborative efforts and maintain their interest in such activities.

Rosenholtz stated that "one of greatest obstacles to the professional development of teachers is the isolated nature of their work" (1985, p. 350). "Isolated teachers turn inward, they have little access to knowledge of alternative ways of working and little peer support for trying to gain or apply such knowledge" (Lieberman, 1988, p. 7).

Collaboration has the capacity to break the restrictive thinking of teachers' relative isolation and to cultivate a culture generating feelings of collegiality, commitment, and effectiveness (Ashton and Webb, cited in Arhar et al., 1988; Lipsitz, 1984; MacIver, 1990). "Previously isolated instructors became team members and developed the same sense of belonging and camaraderie they hoped to instil in their students" (George & Oldaker, 1985, p. 28).

In stating that "teachers' main motivation and reward for involvement with one another will be in the work of teaching" (1990, p. 523), Little pointed out that the greatest overall benefit of collaboration may be the impact that it can have on a teacher's sense of efficacy. Not only does the teacher grow, but so too do his or her students (George & Oldaker, 1985; Lake, 1989). Teachers "given the time and opportunities to work together, formulate educational programs, and engage in educational practices that are more meaningful for students than those formulated by people outside the classroom and students" (Hawthorne, 1990, p. 280). Sarason stated that potential is even further extended because, "when a process makes people feel that they have a voice in matters that affect them, they will have greater commitment to the overall enterprise and will take greater responsibility for what happens to the enterprise" (1990, p. 61).

Chapter Summary

Collaborative teacher ventures are growing in number but opinion as to the quality of those efforts varies. The question is not one focussing on the promises of collaboration but rather on what constitutes worthwhile collaboration.

There is, however, a stronger consensus on the factors that may operate as influences on teacher collaboration. Inhibiting possible collaborative activities are such factors as isolation, tradition, and the lack of suitable skills. Facilitating and maintaining collaboration are such factors as provision of time for a group or team to come together, support from superiors, and a feeling, for those involved, that there are gains to be made from working in a collaborative manner.

Chapter 3

RESEARCH METHODOLOGY

Selection of Case Study Approach

This research study was intended to develop a clearer understanding of a complex process. As it would be both explorative and interpretive in nature and the associated inquiry would concentrate largely on participant input, it was deemed that a case study approach, located in a naturalistic or qualitative paradigm, would be an appropriate methodology. As stated by Merriam, "research focussed on discovery, insight, and understanding from the perspective of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education" (1988, p. 3). More specifically, she asserted that a case study by "concentrating on a single phenomenon or entity (the case) . . . aims to uncover the interaction of significant factors characteristic of the phenomenon. The case study seeks holistic description and explanation" (Merriam, 1988, p.10).

Selection of Research Site

This case study was conducted in a public urban middle school. Factors that influenced the selection of this school as the study site included: the size of the school and the resulting potential for a significant source of data; the fact that I had taught with none of the likely participants and had associated socially with just one of them (an interviewed non-team member); the willingness of the administration and the staff to take part in the study; the apparent success of the school in moving towards implementing a middle school interdisciplinary team approach; and evidence of a parallel move towards the development of interdisciplinary curriculum units. I felt that this mix of conditions provided for a good source of data from an educational situation about which I had the fewest possible preconceptions.

Data Collection

A variety of methods were used to collect data. These included semistandardized, structured interviews, observation with accompanying field notes, and management and curriculum documents.

The data collection was done primarily through interviews. The interview:

> is a powerful way to gain insight into educational issues through understanding the experience of the individuals whose lives constitute education. As a method of inquiry, interviewing is most consistent with people's ability to make meaning through language. It affirms the importance of the individual without denigrating the possibility of community and collaboration. (Siedman, 1991, p. 7)

"The structured interview is the mode of choice when the interviewer knows what he or she does not know and can therefore frame appropriate questions to find it out" (Lincoln and Guba, 1985, p. 269). The semistandardized interview :

> involves the implementation of a number of predetermined questions and/or special topics. These questions are typically asked of each interviewee in a systematic and consistent order, but allow the interviewers sufficient freedom to digress; that is, the interviewers are permitted (in fact expected) to probe far beyond the answers to their prepared and standardized questions. (Berg, 1989, p.17)

Once questions deemed to be appropriate for the interviews were designed, they were critiqued by my supervisor, by two of my peers, and by those present at the proposal of my thesis topic. Modifications were made to the questions before they were posed to the participants. "Creating questions without recourse either to the advice of facilitators or to the testing of a pilot study is a mistake" (Glesne & Peshkin, 1992, p. 68).

The interview questions, after establishing the teaching background of the respondents and their membership on a team, focussed on: team purposes and activities, building of collaboration amongst members, relationship with non-team members, design and teaching of interdisciplinary curriculum, and analysis of membership on a middle school interdisciplinary team. The interviewer attempted to ask common questions of team members and to build on the responses of the participants. Digression from the common questions came primarily in the interviews of three non-team members. In these interviews, the focus was on confirmation of information provided by team members and on gaining perspectives of the team approach from those outside of the teams.

Interviews were conducted with all thirteen members of the one grade six team and the two grade seven teams. The grade eight team leader was also interviewed. She was interviewed primarily due to the fact that she was on a team that did not have common meeting and planning time and also as a further source of verification of data collected from other interviews. Also interviewed were the principal, the teacher-librarian, and the physical education department head. The teacher-librarian was interviewed because of her experience in two of the city's middle schools and in other middle schools and because of her contact as a non-team member with all of the teams. The physical education department head was interviewed as another representative of non-team teachers.

All of the interviews were conducted during a two week period. Most lasted approximately fifty minutes. The interviews were taped, with permission, and subsequently transcribed. In total, some one hundred and sixty-seven pages of interview material were available for analysis. In a few instances, where responses to interview questions were subsequently found to be confusing, clarification was sought from participants.

Prior to the interview stage of my research, a number of observations of the interdisciplinary teams were conducted. These observations were from a passive participation standpoint (Spradley, 1980) and involved general team meetings and sessions where interdisciplinary curriculum was discussed, planned or evaluated. Field notes of these observations were recorded and later analyzed.

Collection of relevant management and curriculum-related documents also formed part of my data gathering. These documents included such sources as administrative guidelines for teams, team meeting agendas, timetables, and curricular and other documents prepared by the teams and the school's administration.

Data Analysis

Data were analyzed from a qualitative perspective. Analysis included the collapsing of interview responses and comments from participants into common categories. Some further augmenting, confirming or extending of the data gathered through the interviews was possible through the use of the field note data and relevant documents.

The focus of the analysis was on those factors considered to be influential on teacher collaboration in middle school interdisciplinary teams and the extension of this collaboration to work on interdisciplinary curricular units. Emerging themes were compared to factors identified in the literature review.

Ethical Considerations

The ethical guidelines prescribed by the University of Alberta Ethics Committee and by the Department of Elementary Education were adhered to. The proposal for my research was approved by the Ethics Review Committee of the Department. All research was conducted under the supervision of my thesis supervisor.

In the process of preparing this thesis, steps were taken to protect the anonymity of the participants and the confidentiality of the data. Before beginning the research, permission was sought and granted by the district superintendent and the principal of the school where the study was carried out. The researcher also met with potential participants and teams to explain the purpose of the research, to indicate the likely process, and to outline those safeguards in place to provide anonymity. Informed consent was received from each participant. In the writing of this thesis no names or specific locations have been used. Where a name was stated in the interview, I have substituted a position, a generic term or used dashes [--]. The numbers enclosed in brackets after quotes indicate the number assigned to that interview and the page of the transcribed interview from which the quote was drawn.

Delimitations of the Study

The bounded system examined in this case study was chosen to provide not only a deeper understanding of the factors influencing teacher collaboration, but also to provide a variety of perspectives within a specific situation. There was participant diversity in terms of experience and teaching assignment and varying degrees of involvement as a member of an interdisciplinary team. Teams who had been together for varying lengths of time were involved. Sources for data collection included a team in its first year together, a team in its second year of operation, and a team on which three quarters of the members had been together off and on for five years.

Limitations of the Study

The findings of this study are limited to the setting and the subjects over a fixed period of time. The researcher relied upon the trustworthiness and perceptiveness of the participants in responding to interview questions. The findings of the study also depended upon the accuracy of the the researcher's observations and the accuracy of data analysis. Although a wide range of views was sought and interviews had a common focus, the information from this research is not necessarily generalizable to other collaborative middle school interdisciplinary teams or to collaborative teacher teams as a whole. Given different teams in different schools, with a similar or a different mix of factors coming into play, the results could vary.

Significance of the Study

The literature indicates substantial research on factors facilitating teacher collaboration in general (see, for example, Rosenholtz, 1991), less on collaborative planning by middle school interdisciplinary teams (see, for example, Kasten, Short, & Jarmin, 1989), and very limited research on the specific focus of collaborative planning of interdisciplinary curriculum at the middle school level (see, for example, Drake, 1993). This study was designed to consolidate and extend the research in these three areas.

Recent reading indicates that middle school interdisciplinary teams are still deemed to be a valid educational direction and are gaining further research support as they continue in their evolution. The literature also suggests that the idea of interdisciplinary teams and interdisciplinary curriculum may well be tried more extensively at the high school level. With this increasing application and the involvement of more teachers, research that provides information in terms of factors that influence teacher collaboration can provide some positive direction and considerations to those involved.

In a broader sense, there is encouragement of more collaborative ventures at all levels of education and by all of the stakeholders. Perhaps in this research there are also considerations that may be of benefit to those efforts or the directions that they take.

Chapter Summary

This study of the factors influencing teacher collaboration on middle school interdisciplinary teams utilized a qualitative case study approach. Data for the study were drawn from an urban public middle school and were collected primarily by means of interviews. Data were analyzed from a qualitative perspective and focussed on the identification of those factors considered to be influential on teacher collaboration in middle school interdisciplinary teams. Significance of the study was identified as were delimitations and possible limitations of the study.

Chapter 4

DESCRIPTION OF THE CASE

Setting and Participants

The School and Its Organization

The school selected for this study was one of five schools in the district that were in the midst of making the transition from junior high schools to middle schools. At the time of the study, the school had forty-one teachers on staff and approximately seven hundred and thirty students. The administrative component of the school staff consisted of a principal, two vice-principals, a curriculum coordinator, subject department heads, and team leaders. The school's time table was structured so that there were six periods of fifty-three minutes per day. The timetable was on a two day [A-Day and B-Day] rotation and every second and fourth Wednesday was designated as a Day Zero. On those days the afternoon was set aside for non teaching activities such as staff and other meetings, school or team professional in-service activities, additional planning and evaluation time, and teacher-parent-student interviews.

The school housed students in grades six to nine, with the students at the grade six to eight level identified as the middle school component. Following up on district directions towards middle schools and reflecting the principal's strong concurrence with this philosophy and a belief in the importance of collaborative teaching teams to its success, the school's administration had moved towards the creation of teams. All students in grades six and seven were placed in pods [four classes of students at the same grade, each class having an identifying name] which were the responsibility of the various teacher teams. One half [four classes] of the students in grade eight were also placed in pods coordinated by one team of teachers. The other half of the grade eight students were organized in a configuration more like that of a traditional junior high school.

The study was conducted primarily with three of the four interdisciplinary teams which were in place in the school at the time of the study. One of these teams was at the grade six level and the other two were at the grade seven level. Primarily due to the fact that they did not have a common meeting and planning time, the grade eight team was not a main part of the study.

Grade Six Team

The grade six team consisted of three female teachers and one male teacher. They all taught full time. Three of the four taught both Language Arts and Mathematics to their home room students. The fourth team member, because of another assignment, taught only Language Arts to her home room and one of the other team members taught them Mathematics. The four members were also paired so each of them taught either Social Studies or Science to his or her homeroom and to his or her partner's homeroom. In this way they utilized teacher expertise and interest and were able to reduce their subject preparations by one. During the teaching of interdisciplinary curriculum units, all students would normally spend some time with each of the grade six teachers. The grade six teachers were also assigned some option subjects, most of them being with grade six students.

A grade six team had been in place for five years, the longest duration for any of the teams at the school. During that time, several short term personnel changes had occurred. Three of the original team members had been reunited as part of the team at the start of school year during which this study took place. Only one of the original members had been with the team for the full five years. Teaching experience for the four members ranged from three years to seventeen years and was primarily at the elementary level.

Grade Seven Teams

Two of the teams in the study were at the grade seven level. The first of these teacher teams was made up of two females and two males. Two of the teachers were full time and the other two were approximately seven tenths and eight tenths time. Each of the four teachers was responsible for teaching one of the four core subjects to all of the students assigned to their team and pod. In addition, three of them taught a limited number of other subjects, both to grade seven and to other grade levels.

This was the second year of operation for this team, the first grade seven team to form in the school. All of the members were in their second year on the team. Teaching experience for the four members ranged from three years to twelve years. Their backgrounds included a mix of elementary and junior high school experience.

The second grade seven team was composed of three females and two males, all full time teachers. Three of them were responsible for teaching one core subject to all of the students assigned to their team and pod. The other two teachers shared the responsibility of teaching Social Studies to the students in the pod. The part of their timetables allocated to this task was one period a day and two periods a day respectively. All members on this team also had additional teaching assignments at other grade levels or at the grade seven level.

This was the first year of operation for this team. One member of the team had been on the grade six team for its first four years of operation. Teaching experience of the team's members ranged from five years to thirty-four years and involved elementary, junior high and high school levels.

Background to the Interdisciplinary Teams

The grade six team had begun as a four member team five years before the time of the study, when the move to make the transition from junior high schools to middle schools began. At that time, grade six students were moved from some of the elementary schools into what had been a grade seven to nine junior high school.

When the first group of grade sixes moved to the school, four elementary teachers were transferred and assigned to teach them. Only two of these four had worked together before. Part of becoming a grade six teacher in the school five years ago was the implicit direction that you would also be a member of an evolving team:

> I guess the principal knew eventually that the middle school would eventually happen. And the first year we didn't have common planning time or anything. It was really hard to get together and to try to do some units together. Then the team concept just kind of took off the next year. And then the next year even more. And, of course, now it's all just part of the middle school. (10-1)

The process followed in the formation of the grade seven teams emphasized the option to volunteer for the teams as opposed to automatic inclusion. In forging the two grade seven teams, administration included a section, on the form used to record teacher interests for the coming year, to indicate a desire to be considered as a core interdisciplinary team member. Those indicating an interest were not asked to specify with whom they might be interested in working, should they be placed on a team.

Once these forms were submitted, administration first analyzed those expressing an interest in teaming in terms of subject area expertise and personalities. To a lesser degree, factors such as teaching experience and possible benefits to the teacher were also considered. In each case, there were more applicants for the positions than openings available. There were also a number of people who were eligible who did not express an interest in joining a team.

Once administration made its decisions, teachers were contacted regarding the possibility of their joining a team. They could then accept or decline. In at least one case, a teacher who had merely expressed a request for more information was approached and asked to become a team member.

Selection of Team Leaders

Team leaders were also determined by the school's administration. Once a team had been determined, application for the position of team leader was open to all members of the team. Those who applied were interviewed by the administrative team. If more than one teacher applied, the principal, in consultation with his vice-principals, made the selection after the interviews. The members of the team had no input as to who should be the team leader, nor were they necessarily even aware of who had applied for the position.

The appointment was for a two year term and had time and financial allowances attached to it. The general philosophy expressed by administration regarding how long a person would be a team leader was:

> If a person has done a good job we will, unless there are some really extenuating circumstances, we'll give that person the nod for a second two year term, because quite often they learned a lot in the process and you can apply that. (1-6)

Team Leader Responsibilities

The responsibilities of the team leaders were outlined in the school's faculty handbook.

I. Each team leader was responsible to:
a) develop and coordinate team activities to maximize student potential and learning
b) coordinate the establishment of team goals for the current year
c) chair weekly meetings of the team
d) have predetermined meeting agendas
e) coordinate cooperative field trips
f) become familiar with the middle school philosophy by gathering, interpreting, and applying middle level data
g) network with other teams and departments
h) keep the building administrator informed as to progress and concern
i) discuss and design instructional methodology which best meets the needs of individual students of the team
j) investigate ways of providing ongoing enrichment activities for the advanced student
k) work collaboratively with team members to better understand students' behaviour in their individual classrooms and in so doing work at developing a common approach to handling inappropriate behaviour, missed assignments, etc.
II. Budgeting
- provide the administration in charge of external budget with a budget plan for his/her team

III. Professional Development Activities
- organize and coordinate one workshop per semester
- integrate new members into the team in a manner in which they feel that they are an integral part of the group
- share general and specific middle school information with other staff members.

Team Meeting and Planning Time

To encourage the development and functioning of the grade six and seven interdisciplinary teams, common meeting and planning time for team members had been timetabled. Each team received three common preparation periods every six days. This applied equally to both the full and part time teachers. One grade seven team member was also the school's department head for Language Arts. He was given an additional preparation period every two days for the responsibilities of this position. One teacher, who taught an extra period of music outside of regular school hours, also had a timetabled preparation period every day. Team leaders were also given an additional preparation period every two days, which effectively gave each of them a preparation period every day.

Interdisciplinary Curriculum as an Example of Collaboration

Interdisciplinary curriculum is a significant element of a middle school philosophy and normally desired as a major outcome of employing a middle school approach. Much of what was observed of the participants in this study and the questions and responses in the related interviews focussed on this concept. It was in the teams' planning and teaching of interdisciplinary curricular units that the collaboration established through the meshing of a number of facilitating factors was truly evident and rewarding to both teachers and students.

Participants' Definition of Interdisciplinary Curriculum

Although there is a broad spectrum in the literature as to what qualifies as interdisciplinary curriculum, in this particular instance teachers were generally in agreement on their emerging definition. They saw it as the integration in some way of two to four of the core curriculum subjects, and occasionally other subjects, under a commonly agreed upon theme, usually drawn from one of the four prescribed curricula:

> For me interdisciplinary planning involves finding common themes or threads within strands of the curriculum, in the core and option areas, and trying to weave them together to make meaningful experiences in learning for students. (9-4)

> To me it's taking a theme or a cluster of themes and applying the different disciplines to that theme or cluster of themes . . . So we used that particular theme as a chance to have the kids looking at a theme through those particular core subjects. (7-5)

> My opinion keeps changing. I can see interdisciplinary just being if I'm teaching science -- something to do with density formulas -- I make sure that I do it the same way as the math teacher would teach algebra and just following through in the same sequence of steps. I can see it being that simple to the full blown . . . with each of us doing our own thing within the theme within our own subject areas. (14-4)

> Well, that definition gets tossed around a lot. When we first started, I think, when we went interdisciplinary, it was to just do anything to get all four subject disciplines involved. But now we're moving to the idea that we're looking at a theme or an idea and just getting all of our people involved and not just teaching a topic or different aspects of a topic. . . . You can touch on all the subjects if it fits but you just don't pick a topic to make it fit your curriculum. (15-5)

Also of note in their evolving definition of interdisciplinary curriculum was a realization that it wasn't necessary to do everything in that manner and there were times when it was more appropriate to limit the subjects or perhaps take a different approach altogether:

> I feel really strongly about from what I've seen and now from what I've experienced, that a team should avoid thinking that interdisciplinary planning has to involve every subject area. I don't think that it needs to and I don't think that is necessarily it should. (16-8)

> I think it's hard to make everything interdisciplinary because there's some subject matter in some subject areas you just can't fit into an interdisciplinary thing. And sometimes too, I think we've looked at maybe a cross over between say social studies and language arts, but not involving science and math in this particular thing. It's really tough to incorporate all four areas in every unit that we did. Because some subject matter you just can't do. (8-6)

Planning, Teaching and Evaluating an Interdisciplinary Unit

Examples of themes used as focusses for interdisciplinary units at the grade six and seven level included space, the environment, Japan, the media, negative effects of smoking, mythology, and world awareness. Of note was the fact that when one grade seven team did a particular unit, the other team did not feel compelled to do the same unit.

The themes were commonly the outcome of some form of collaborative venture, limited by such factors as curricular fit, teacher and student interests, and resource and time availability. In most cases, they came as a suggestion from one of the team's members or from the team's brainstorming efforts and, in a few instances, they were reworked versions of the efforts of others:

> We had an activity where an idea just came up and the Social Studies teacher said, 'I'm doing a paragraph.' The Language Arts teacher said, 'I'm doing keyboarding; we can keyboard the paragraph.' The Math teacher said, 'We can analyze it for frequency of words.' And all of a sudden there was a Wheel of Fortune Game built out of it. So it can happen very spontaneous like that or it can happen very planned like the cartoon unit. (3-4)

> We get together and come up with ideas and throw it around and like you know, 'Do you want to try this? No, that's not up my alley. Okay, how about this?' We just brainstorm ideas basically and see who wants to do what and then we try to figure how, if we do that, how are we going to do it. (8-5)

> We've had three ways that they've developed. One is just through brainstorming at a team meeting. So we'll sit down in a general conversation on what's going on in the individual subject areas. We find out there's some common threads there. Let's attempt to take advantage of that. We have some that go just because of the physical proximity of our teaching stations. . . . Some of our interdisciplinary planning goes on right there. We all teach with our doors open. We all hear what goes on in the other rooms. 'Hey, I heard you talking about this specific thing.' . . . And the third way we've developed interdisciplinary units is that somebody has come in with a lot [a unit previously planned outside of the team] and a desire to do something. (16-5)

> It [cartooning unit] was planned last year by a bunch of teachers. I wasn't involved in the planning. The unit was available and never been tried. So he had the unit and he said, 'Why don't we try this cartooning thing? Give

> it a chance and see how it works out?' So we all agreed that that was a good idea. Since it was already available, it made our job a lot easier. (8-6)

Making a decision on what interdisciplinary theme would be developed and the general process followed by the teams to expand that theme into a teaching unit both showed the teachers' respect for one another's abilities and teaching responsibilities, a lot of give and take, and many opportunities to make suggestions:

> A lot of give and take came in that first brainstorming to figure out a theme. That's where the biggest part was. Once we got cartooning and once we jumped over the hurdle of the administration and the logistics of the thing, then it was really easy and agreeable. (13-7)

> When we planned we came up with an idea and we were real different thinkers and some of us would want to start with activities and we generally mapped out lots of different activities and then we kind of grouped them into themes under your major theme and then planned out the days -- okay, we will do this, then this, then this. (3-6)

> Our group can be fairly random that way. 'Oh, we can do this this or this.' Then it's too big, which is good. Then we start to narrow down and see realistically what each of us can do. I think from the outside it might look like a messy process, but there's definitely a process people go though. Because there's always somebody on the team and I can't tell you if it's always the same person or not, who just before the bell is going to ring will say, "Okay, what are we going to do?' And that's when things solidify. And sometimes that's over a period of several meetings and sometimes it's just within one meeting. (7-6)

> On our team it's interesting because people have been very careful, I think, to respect the disciplines of others. So there are lots of prefaces like, 'This is just an idea, but have you ever thought of?' So people are still left with complete control over their own domain, which has been part of our team which I've really appreciated. But at the same time there's a willingness to share. And they're really enthusiastic. (7-6)

The sharing was not limited to the planning phase. It also extended to the actual work associated with the unit:

> We have made a decision as a team to do this so I have to make sure that I do my part to make it work. (3-9)
>
> Oh yeah, there's lots of movement over areas. And then we sat down and kind of delegated. 'Well, you're good at this, so you do that and you're good at this, you do that.' And we kind of just delegated the work amongst all of us. (8-6)
>
> I think you have a commitment to the unit that you are going to do . . . I think when we say what has to be done, when lists are made up so that different people are assigned . . . Whereas if one person just said -- if the team leader says, 'I'll do this, this, this and this' -- it doesn't get the rest of us to buy in. (3-9)

As far as the actual teaching of the interdisciplinary units, the original approach had been for each teacher to develop some lessons which he or she would then share with the other teachers on the team and they would then all teach the same lessons. It was soon realized that this approach created extra work, increased the need for precise communication, and did not necessarily best utilize the expertise of individual teachers. The alternate approach that soon evolved was for the teachers to develop a limited number of related lessons and then have the students rotate to them. If guests were involved in presenting sessions, teachers would usually rotate with a group of students so that they would be aware of what had been presented to the students.

During the teaching of the interdisciplinary units, collaboration among team members remained high in the form of on-going communication concerning the progress of the unit:

> We always checked every day. It was usually a little congregation outside the door in the hallway and, 'Okay, what are we doing?' and 'Okay, this is what we are doing today.' (3-7)
>
> Always we reevaluate, we refocus. Sometimes we say, 'Does it look like students are completing what we have asked and are they just wasting time or do we need to pump in some more direction here?' We keep notes, especially when they are working independently and are in a

> variety of areas. (6-7)
>
> We are certainly going to have meetings every day. I think we may -- you know, find out some things that have to be repaired along the way. (13-8)

Communication and collaboration also continued after the unit ended and the team evaluated what had happened:

> Well, we usually rehash it and say, 'That was great or that part wasn't so good.' So we can try this next time or, you know, we try to see how it could be better or different or which parts worked really well and which parts didn't work out so well. Just try and go over it so, in the event anybody wants to do it again, it will be better or easier for the next person. (8-6)
>
> We just meet all the time and we always check in after something has happened. You know, 'How did that go? What was the problem? Or what didn't work very well?' We keep track of that. This year our Japan Day, it was probably 200% better than last year because of our experiences we had and we remembered what didn't work so well. (15-7)

Finally, collaborative planning and teaching of interdisciplinary curriculum units tended to increase commitment to seeing those units reach successful conclusions:

> Well, I think if you say this is going to be our one big project and we are going to do this and we are going to try and do it well, I think that comes with professionalism. . . . I think when you decide as a group and you start doing the planning and the more time you put into it, the more committed you become. Again, I don't know how you make anybody committed to anything other than you decide that it's a decision. Like to me, commitment is a decision. You decide to make this work. (3-9)

Chapter Summary

This case study was carried out in a middle school not unlike many urban middle schools. Over the last five years the school had been making a transition from a junior high school to a middle school. This middle school focus saw all students in grades six to eight placed in pods [four classes of students at the same grade, each class having an identifying name] and taught primarily by interdisciplinary teacher teams. In addition, the students received option subjects from these teamed teachers and a limited number of other teachers.

These teams each had a team leader and usually met on a regularly scheduled basis. The meetings focussed on a variety of topics including the planning of interdisciplinary curriculum units, a term which was interpreted differently by team members. Once units were planned and then taught, the teams evaluated them for future use.

The collaboration of team members has been an evolving and generally rewarding experience for those involved.

Chapter 5

FINDINGS: TIME AS A FACTOR INFLUENCING TEACHER COLLABORATION

The collaborative team efforts and the sense of professional community, evident in the middle school teacher teams observed in this study, were not the results of simply placing a number of teachers together and assuming that they would cooperate. Rather such collaboration appeared much more likely to occur because certain influential factors were present.

As identified in the research, this study also found time to be one of those factors. The issue of time was both significant and multi-faceted in nature. It could be be categorized in many ways. This study analyzes it from the perspectives of the organization of time and the quantity of time available.

Organization of Time

In organizing a timetable to facilitate the concept of interdisciplinary teams, key considerations had to be kept in mind. These included the opportunity for team members to meet and plan during a common preparation time and the provision of some flexibility in the scheduling of teachers' contact time with students.

Common Meeting and Planning Time

The findings of this case study clearly support the findings from other research that teachers generally hold a strong opinion as to the crucial nature of common meeting and planning time for the facilitation of collaborative ventures.

Comments endorsing this, and reflecting an early focus by the participants on concrete or easily assessed factors, included:

> There has to be lots of time set aside for teachers to come together outside of prep time, outside of the rigours of everyday battles, as it were, to meet and get their thoughts down, to get some long term planning done, and it can't happen outside of school on the teacher's private time. (4-3)

Administration concurred with the need for common shared time and acknowledged that, if possible, it would be a major consideration. "They [others attempting to implement interdisciplinary teams at the middle school level] said, 'It is a must that you have a common planning pack [time]' (1-11). In support of this belief, administration had managed to provide common meeting and planning time for three of the four existing teams in the school.

Teachers from the three teams generally responded very favorably to this common time and perceived that it had a positive impact on their productivity as a team:

> I'm surprised that I come back to that so many times, but having a time set aside where it can happen and where it is meant to happen is the best. (7-9)

> The fact that we have a common planning time helps a lot. First for bringing us together. Giving us time together to share, provide support and plan things. (9-7)

> I think what happens at some of the other junior highs, talking to other teachers, is that they have so called teams but they don't have common prep time. They're supposed to meet on their own time, plus they have other kids. I think that just puts extra pressure on the teacher and makes it twice as difficult. I think the common prep time is critical. (5-2)

Common meeting and planning time was even recognized as an important factor by non-team teachers. One of them, a person with teaching experience in a variety of assignments and locations, commented, "Well, what makes it really work here is the fact that they have common prep time" (2-7).

Although a significant number of the teachers expressed appreciation for the three weekly common meeting and planning periods, there were those felt that it was still inadequate. One participant referred to a reminder from a long past in-service, in these words: "Remember the woman who came to talk to us and told us, 'Don't even entertain it if you don't have a spare a day' " (2-10). Another teacher stated,

> One of the things that really bothered us, and I have to say this, is that we don't get enough planning time together. We get one period every two days and it's not enough. . . .You cannot be successful if you don't have a period every day to meet with your people. (15-4)

The other team in the school, a grade eight team, also had three preparation periods per team member every six days. However, because of an inability to work it into the timetable, these periods were not common to all of the members. Although this team also tried to meet once a week or whenever there was a concern, when asked about possible down sides of teaming, the team leader responded, "For us it's trying to get together. I feel sometimes I'm really impinging on their time and expecting too much of them to give up their lunch hour and after school" (14-4). As to the effects of not having a common planning time she stated,

> Unfortunately our team this year is without cooperative planning time. I don't think that the expectations for our team this year are as great. That and having five teachers and three classes and no common planning time. I feel the pressure to make it successful, in limitations, but I don't think the principal expects quite as much from us, because he knows it's difficult to get our schedules [together]. (14-3)

Members from other teams also expressed concern for the effect that the lack of a common meeting and planning time during the school day might have on the grade eight team:

> There is one group here that doesn't have common prep time. They have spent many, many hours on their own. I think if it happens again they're going to look at it and say, 'Well, why should I!' (13-9)
>
> I know the grade eight pod doesn't have that and they face incredible difficulties because they have to get together after school and at noon and your day just runs out. (3-4)

When asked whether teams would function as well without common meeting and planning time, respondents tended to feel that a similar degree of collaboration would be difficult:

> Next year if they are starting to have to meet at 7:00 or 7:30, I think it will die off really fast. (2-7)
>
> It would be tougher because you definitely have the attitude we're all going to put time in to make it work and if we all don't have that opinion then there's definitely going to be some problems. (11-4)
>
> That would be really tough. I think that it would be hard if there wasn't common planning time, because even with our common planning time we find it hard to sit down and actually get something done, and if had to be outside of school time it would be really hard. (8-2)

Teams and individual team members used allocated preparation time for a variety of purposes. In the team leader section of the school's faculty handbook, it was stated that "each team leader is responsible to chair weekly meetings of the team." The teams tended to hold this mandated team meeting during the first scheduled common meeting and planning period of the week. The other two periods were normally utilized according to the individual judgment of the team's members, although in some cases they were used partly or fully as team meetings, called by the team leader. In general, the closer a team was to initiating an interdisciplinary unit, the more likely it would meet more than once a week as a team.

During team meetings, members focussed on a variety of matters. Consuming the biggest percentage of available time were discussions pertaining to students. These sessions often involved the guidance counsellor and covered such topics as communication with the home, student progress, student work load, evaluation, placement, discipline, recognition, and instructional and management strategies. The exchanges between the participants, although often interspersed with humour and personal comments, were frank and focussed. It was satisfying to find that the emphasis was not limited to solving individual or group problems, but also included celebrations and the development of strategies for further improvement.

> It may be discussions about these students in terms of interactions and performance, achievement, or any of those types of things that are student focussed. (16-1)
>
> It seems like we spend most of our time, whether that's the main focus when we get there, but we seem to spend most of our time on student concerns and really I think that should be our number one priority. We always do that first thing in our meeting. Just generally ask if anyone has noticed anything about certain students or having problems with certain students. I find that really helpful. (5-1)
>
> We had sevenkids with fairly severe social problems and we spent a lot of time pondering that, sharing horror stories and also trying to put together a strategy that we could all work with on these particular kids. Then we spent quite a bit of time developing certain things like the study room if you don't do homework. (13-1)

Other than student matters, a significant percentage of team meeting time was used for discussions about curriculum and related topics. Of particular significance was the planning, implementation and evaluation of interdisciplinary curriculum. This focus is discussed in detail in other parts of this report.

A third concentration in team meeting time was general organization and maintenance of teacher tasks such as supervision of homework rooms and scheduling of various academic and other activities.

Time and Communication

The issue of common preparation times was also seen to affect communication between individual teams, between teams and non-team members, and between teams and administration. Teams did not have their preparation times during similar time slots. One respondent replied, when asked about the degree of contact with other teams, "Not a heck of a lot to be honest, because their preps are at different times" (5-4). Most non-team members teaching option subjects also had preparation periods at different times from team teachers' times. Generally administration members tended to be teaching during those periods when teams where meeting, or they where required to be present in the office. As one teacher stated with reference to what seemed to be a lower level of involvement from non-team members, "Just because of the time, they can't make it to our meetings. They're just involved with other things" (11-3).

As a result, although there was some individual subject sharing by the grade seven teachers on different teams and by team leaders at administratively scheduled team and department meetings, teams as complete entities did not generally meet with other teams.

Advance notice was identified as important if option subject teachers were going to become involved in interdisciplinary units. One of the options teachers stated that before he had made his feelings felt to the teams and accommodations had been worked out, his attitude had been,"Don't come up to us in the hallway the day before a unit and say, 'Oh, by the way, we're starting a unit tomorrow. What can you do?' " (12-2)

Linked Periods

Another organizational aspect of time related to interdisciplinary teaming in the school was the concept of linked periods. With linked periods, students in a pod spent three or four consecutive periods with the team of core curriculum teachers assigned to that pod. As the need warranted, such a structure allowed for considerable team flexibility in scheduling. Those team members who were on the grade seven team with linked periods expressed the benefits of such timetabling:

> I feel another critical element is linked periods. If you have linked periods, you can go on field trips, have projects, show them some videos, and not have to worry about a bell schedule. (9-4)

> We often give up a period of ours so someone else can do something . . . altogether with all 120 students, like to write a test to avoid cheating and talking about it. We'll give up a period one day so that person can have all four classes and we'll shorten or lengthen some -- so you might lose time that way, but those adjustments are made both ways. (15-5)

Although linked periods were preferred, the grade seven team without linked periods still tried to accommodate, within obvious limitations, the special time needs of other team members. One of the prime reasons that this team did not have linked periods was due to the fact that two of its members were quite divided in terms of their teaching assignment (one taught one class of social studies as part of the team and the other taught two classes of social studies as part of the team). As a result, the team was seen as:

> . . . not having a schedule that is really conducive to the pod format . . . and by that I mean in one grade seven team they have a block of four periods, they are all together, and they can block them together, and that works wonderful. In our case we have four subjects, five teachers and three classes. They don't fit well. (16-5)

Availability of Time

The total quantity of time available to team members was also a factor influencing participants' thoughts about a collaborative team approach. Although the participants generally saw the demands placed on time available to them as increased in a team approach, surprisingly, only one of them mentioned it as a consideration when she was deciding whether or not she wanted to be on a team:

> Last year when I was asked, when I filled out that sheet if I wanted to be on a team or not, if I wanted to be in a pod, I thought, 'How much commitment is going to be involved here? Can I do that with the other activities as well?' I thought about it a while before I made the decision. (8-4)

Effects on Time Available to Teachers

Although the teachers perceived that a team approach brought increased demands on their time, most were still generally willing to give that extra effort:

> We recognized as we talked and as we read information and talked to others as well, that there would be a significant time commitment on our part to make the team successful. (16-2)

> I know the other people are just more than willing to bend over backwards. I mean we stay after school, we do noon hours. We try to plan. We do this daily planner for the students and we do that in June. We stay after school and we just make up these copies. We were thinking of sending them out to a printer, but we've always done them ourselves. And then none of us seems to worry about giving up our professional time for that. (6-10)

However, when questioned as to the down sides of a team approach, a number of the respondents still indicated that the loss of "personal" time was a major detracting factor. That loss of time fell into two identified sub-categories: a decrease in the amount of individual preparation and planning time and an increase in the demands on other non-assigned time:

> It's really demanding on your time. You can't do as much for yourself. Like I don't do my marking in my prep because there's no time left. (15-5)
>
> Time again, not having enough time to do properly what I know should be done, after discussing with my colleagues what could be done. (7-9)
>
> We have regular meetings on B-Days. The first B day of the week is usually a full period. Then we have the beginning ten to fifteen minutes that usually stretches into a half an hour the other B-Days the rest of the week. And sometimes it's inconvenient depending on the work load that you have, and if you have phone calls to make or photocopying to do. Sometimes it's, 'Ah jeez, I didn't get my prep today.' (8-5)
>
> It takes much more time. A lot of these things require more effort . . . you wouldn't do that if you weren't on a team. (13-4)

The things that they referred to that increased demands on non-assigned time included: discussing students' progress and behaviour with parents and reporting the results of those discussions back to the team, holding special assemblies for students in the various pods, preparing pod newsletters, supervising pod homework rooms, and preparing and evaluating interdisciplinary units.

Some teachers also stated that, in operating as part of a team, there were times when they had to adapt to team time lines or modify personal time lines:

> In terms of a specific time line that you may have in mind or may have developed for your subject specifically, what I've found, and for whatever reason, in part, I think partly due to our own inexperiences right now, we're probably taking twice the time to cover the concepts when we do it in our interdisciplinary format. (16-6)

Part Time Team Members

Also falling under the category of quantity of time was the issue of part time team members. Part time members fell into two categories. First were those who were core subject teachers assigned to the team but teaching on a part time basis. Second were those who were teaching most of the time in the options areas but teaching a limited number of core curriculum classes as a team member.

Full time team member reaction to the impact of other members being only part time ranged from a perception of it as not being a significant problem, to that of concern that effective collaboration was more difficult because of perceived timetabling problems and inequities of load and involvement:

> Perhaps the only roadblock I see in preventing us from getting to work together and, through no fault of their own, two of our teachers are part time. And so there's time they're not here. So that limits it somewhat. (9-7)
>
> I'm the only one in the pod who really gets ripped off with time . . . the other two teach half time, so they get two preps a day anyway, plus the same number of preps when they are here. (15-9)
>
> Well, two of them are part time and I think that really impacts on not only the commitment, but also the fact that, 'Well, I don't come in until 10:30 today or 11:00', and things get so it puts an onus on the other two full time people to pick up the load or the slack. (2-2)

Part time team members also varied in their perceptions of the effects of their assignments. When one of them was asked whether she considered herself to be a full team member, her response was, "Sometimes not, because there are certain things with the other part of my job that happen, that take me away from the school . . . and I don't see all three of the classes" (8-2). When asked whether she saw her "double-duty" as a difficulty, her answer was, "It may be more for the other people than for me. There are times when other members of the team have to take up the slack if I'm not around to do it" (8-3).

On the other side there were those that felt that their part time status had less of an effect on the team as a whole than on their own particular situation:

> Communication is really important and I think there are times -- in fact I know there have been times when I have felt out of the team and as a result felt that it was more difficult for me to teach well. (7-4)

Team Leader Time

A final element of quantity of time that related to the functioning of interdisciplinary teams was the time made available to team leaders. Three additional periods were provided every six days to team leaders. None of the team members who were not leaders expressed any envy of this extra concession. The team leaders appreciated the time and utilized it for a variety of tasks.

> So it takes a little more time with communication for all parties concerned, planning meeting agendas, trying to look ahead for what's coming up, to plan and organize, the dealings with the other colleagues and so on. (9-8)

However, one team leader also expressed the feeling that the time allowed for the responsibilities was not likely enough.

> I find it really demanding in that it never leaves. I'm constantly finding there are team leader type things happening . . . And the biggest thing is that I don't find that I take that team leader hat off and just give it a rest. And whether that's the nature of the beast, or the manner in which I've chosen to take that, I'm not sure. But, I'm finding it tiring. (16-9)

Of those factors contributing to teacher collaboration, the provision and effective organization of time was quickly and frequently identified as an essential by the teachers in this study. Time was viewed as necessary for collaborative efforts to take place, for the achievement of team and personal priorities, for necessary communication, and for the provision of flexibility in scheduling some teaching situations. Time was also assessed by the participants in a quantitative sense, both in terms of how much of it was available and what additional demands a collaborative team approach might make on the time that was available. Time, especially in the early stages of collaboration, was seen as a pivotal factor.

Chapter Summary

Time as a factor influencing teacher collaboration was viewed as significant by the participants in this study. It was a tangible factor that took many forms. From a organizational perspective, there was a desire for common meeting and planning time and linking timetabled periods so that the collaborative teams could be more effective in dealing with student issues, interdisciplinary curriculum, and communication. From a quantity perspective, there was a perception that teaming brought increased demands on time and thus more time was needed. Also related to the issue of quantity of time available was the issue of those teachers who were part time members of a team.

Chapter 6

FINDINGS: ADMINISTRATIVE SUPPORT AS A FACTOR INFLUENCING TEACHER COLLABORATION

The factor of common meeting and planning time was often closely tied to another common facilitating factor identified by research, that of administrative support. A review of recent research indicates that teacher collaboration is more likely to happen if administration actively supports such an approach. The information gathered in this study did not indicate strong concurrence with the research findings in the case of administrative support from a district level but, from the perspective of the administrative support at the school level, there was a more marked agreement.

District Level

Although district administration had originally been the prime instigator of a move towards middle schools and teaming, teachers' perspectives of the reasons for that direction and the current level of district support varied significantly.

One teacher gave more credit to the case study school than the district for starting the move:

> I think we were really developing the idea before they [the district] really were seeing it work yet. I think we really came up with a lot of really great ideas . . . so I feel in some way we really started it, even before they realized where they wanted to go and what they wanted to do. (11-2)

From the other end of the perspective and echoing district philosophical statements another teacher stated,

> I feel that we've shifted towards teams to incorporate some philosophy and cohesiveness that we have in the elementary schools and to not operate a middle or junior high school as a sort of mini high school

> where students have such a varied timetable, travel around school a lot and have so many teachers. (9-1)

Many perceived the original district move towards a middle school approach to be predicated by local economics and the building of a new high school:

> I have heard that it's because they wanted to avoid building elementary schools and it's simply to make good use of the building facilities that we have now, but I'm hoping that the district is also convinced that middle schools is the way to go for grade six through eight. (6-2)

> Well, I think they stumbled upon a very good idea, but I think it came about because they wanted to open up a high school and they wanted to switch the high schools to 9-12. And so they said, 'Well, we'd better back up what we're doing here; we'd better find out any support for this system there is.' (5-3)

> I think the move was totally economic originally. I really don't think they gave emphasis to the structure being better than the previous structure. I really feel that, but I think now as we've become more involved with it, I think they recognize that it was best. (1-1)

Interpretation of the district's current level of support differed considerably. Some spoke in terms that indicated their uncertainty:

> I'm not sure if I'm aware of the support as far as teams go, although I know it's obviously there because if it wasn't, we wouldn't have teams. (4-4)

> I don' t know if there's really any. I really don't . . . we have never had anybody from the board to observe or give any kind of input or anything. I really can't say if there is or not. (8-2)

> I don't get a sense that it's a priority. I don't get a sense that it's not a priority . . . I don't think they're really aware of the teams. I know they kind of clue in because of the middle school concept, but I don't think it's a big focus for them. (10-3)

By far the majority of those who were able to be more specific in recognizing district administrative support for middle schools and teaming tended to see that support as being limited in nature or duration:

> I think they are very much determined to first of all have it happen, and it is going to happen. They want it to be public and they want it to be high profile. I don't get the impression that they want to invest the resources to make it as effective as possible. (16-3)
>
> Well, if you go back a long way to when they first started discussing the change to middle school, there was one full day in-service they gave us. That's the only thing I remember directly from the district. There have been other smaller meetings where they have discussed middle school and I believe that we have had the assistant superintended at staff meetings, maybe once or twice, dealing with the same thing, and more or less selling it to us. (13-2)
>
> Well, I think in terms of support it's a little easier if you're getting say consultants to come and talk to you as a team than say as an individual teacher. They'll make more time to do that. So that is more supportive. Other than that I really don't see any real tangible evidence of support. (17-4)

School Level

The principal of the school was generally recognized by the teachers as a strong supporter of the middle school philosophy, for student success through that approach, and for the teaming of teachers. He indicated his own feelings on these aspects when he stated:

> Well, I think there is better opportunity when teachers work closely together and have a common group with whom to teach. . . . I expect my teachers and team leaders to meet at least once a week and generally the first of the week. For the most part the topic of conversation cannot help but be kids, because that's the common element that all share. They all teach the same kids. So ways [desired outcomes of meetings] those kids can be assisted. (1-2)

His philosophy was also reflected in his choice of staff and in their comments about why teams worked:

> Just the willingness to do better for kids. That's at this school -- it might sound stupid -- but that's really strong at this school. There's a lot of people here, you know, the bottom line is 'How's this going to help the kids?' And I've been in some situations where it's been 'How's this going

> to make life easier for me?' And I don't see that here. (12-5)

Although a majority of those interviewed did not feel that district administrative support for middle school teams was present, most of the staff interviewed were of the opinion that the school's administration gave strong support to the concept:

> In my opinion, the administration wants this school to be on the cutting edge of middle school and middle school philosophy that revolves significantly around the team teaching, the team learning, the team cooperation concept, and so this school has unparalleled support of the team at work and the needs that it should be able to satisfy. (4-4)

> I think it's [school level administrative support] been excellent. Our school has been one of the first, sort of one of the front runners in the district in terms of teaming. I feel there's quite a commitment on the side of staff and administration to put teams into place and get them up and running. (9-2)

The support referred to by the teachers was seen as being both tangible and philosophical in nature. As addressed earlier, many saw the provision of common meeting and planning time, substitute time to allow for intensive planning, and other concrete examples as strong indication that the school administration's backed teaming:

> [The school's administration is] Very entirely positive of it. We have been provided with common prep time. We have been provided with a budget within each team so that we can purchase items that we feel will be of benefit. They provide us with materials on middle schools in terms of middle schools and teaming, in terms of written information that they come across or goes to them. And once again, as I have mentioned, they provide opportunities for team leaders to travel to conferences. And in at least two specific cases . . . the team has been provided with release time the year prior to visit another middle school where teaming was taking place. (16-3)

The stated philosophical support of administration for teams and the opportunity for considerable autonomous development was also acknowledged by a number of those interviewed:

> Well, I think there's a benefit from taking a group of ninety kids like we have and giving them a group of four teachers like we have and saying to those four teachers, 'These are your kids, look after them, do the best you can with them.' It sort of defines stuff for us, so we can get a handle on it. (13-3)

> Well, if we decide something within our pod, that we'd like to do this and we take it to our administration, so far we haven't had any refusal, like 'No, you can't do this.' (8-2)

> I think just generally verbal support, memos and stuff, and information that goes to your team, and to consider this and this. So I think there is quite a bit of support for it. And when we were working out a lot of our units, and that there was good positive feedback from administration in that they asked us to show other groups what we were doing and that's positive. (17-4)

Although a majority expressed appreciation for the direction and support of administration, all were not positive about the overall results. One respondent felt the related demands could become too much:

> There's a commitment to team and it's a combination between support and a push. So that I know that we have to get this done. But part of that push and that support is just a determination that no matter how hard it is and how much time it takes, we're going to produce all these things, and my personal reaction is that it's just too much, even though I don't know how it should be pulled back. (7-9)

Doubt about the consistency of administrative support was also stated by one teacher, who stated, "It's always there on paper. I am not convinced that it's always there in practice" (7-3). This was an interesting statement that pointed out to me, as researcher, the need for collective input as opposed to individual thought or opinion and also indicated that there were also perceptions of inequities, particularly in the area of in-service opportunities. This latter point will be discussed further in Chapters 7 and 11.

Doubt or dissatisfaction also surfaced as a result of the autonomy that administration had chosen to give to teams. There were instances where conclusions reached independently or actions taken without necessary communication or understanding caused temporary disharmony. The infrequent administrative attendance at team meetings, the shifting of students from class to class without administration's awareness, the process of selecting members for a team, and the issue of single grade versus multi grade home rooms were examples of such discord.

Team Leader Level

Another component of administrative support was that provided by the team leaders. The position of team leader did not appear to be of interest to many. For that matter, a number of teachers were not even aware of the selection process for team leaders:

> I don't know how he was chosen. Perhaps he put in or maybe he was approached. I don't know. (6-5)

> Acclamation, I think, in this case. I don't know if he volunteered for it. I don't know. I think he was kind of appointed, but maybe I'm wrong on that. (8-2)

One of the team leaders even stated,

> I did write a letter of intent to be on a team. I can't recall if I specified to be a team leader. I think the appointment came from the principal. But I did write a letter that I was really committed to the philosophy and then from there I was selected somehow. (9-2)

All of the the team leaders observed showed a commitment to middle school teams and a professional approach to their defined responsibilities, maintained good rapport with their team's members, and were generally acknowledged as having a positive influence by their team members:

> Our leader is a very good leader. He always let's us have input. (6-3)

> Our team leader is very easy going and yet he knows what has to be done. (15-2)

Already mentioned was team leader participation in team leader meetings and the sharing of the information from these sessions. In addition, they carried out other responsibilities such as the chairing of team meetings, serving as a prime liaison with administration, and often acting as a catalyst for interdisciplinary units. Besides that, as will be discussed in Chapter 7, they often took leadership in the social and professional moulding of teams.

In spite of these many responsibilities, team leaders generally appeared to attach little status to their position and and communicated a feeling of being equals with their fellow team members:

> Basically I see myself being the liaison between administration and the rest of the grade teachers. . . . as a team leader I don't really see myself as a leader of them, more of a coordinator type. (10-2)

The knowledge that one is encouraged and supported by superiors in establishing new processes of doing things is important. It was evident in this study, that although such support from the district level was also desirable, once the teachers became convinced of the benefits of teaming at the middle school level, strong support within the school and support within the team itself was sufficient to maintain desired progress. It was also apparent that administrative support can be expressed in many ways and interpreted in many ways. As to where a transition from an approach accentuating strong and overt administrative support to a position emphasizing encouragement of autonomous development comes, or whether such a complete change is really appropriate, remains a subject for speculation and further investigation.

Chapter Summary

Active and on-going support of superiors for a desired change has been identified as an important factor in bringing that change about. In this case participants generally viewed internal administrative support as more important and instrumental than that provided externally. The relative skills and needs of the participants had an impact on the value placed by both individuals and teams on the various forms of administrative support.

Chapter 7

FINDINGS: IN-SERVICE AS A FACTOR INFLUENCING TEACHER COLLABORATION

Administrative support was also closely tied to yet another common influencing factor indicated in the research, inservice activities to enhance team development. In comparison to the importance placed on in-service in the research based findings, this study indicated that team members felt that the building of a team attitude and approach had not been significantly dependent upon in-service sessions on team development. In discussing these inservice opportunities, the teachers considered both the formal inservice or professional development activities that were primarily district and school initiated or supported and also identified informal activities that were seen as contributing to team development.

The potential impact of in-service came with a clear recognition that when teams formed there was a need for the provision of appropriate in-servicing:

> They had growing pains, no questions. Rather than having to work cooperatively, many of them did not have to do that in the past, they were thrown into the arena and it took some getting used to. (1-3)
>
> No, there wasn't any as far as I can remember. We were just there as teachers and that was it. Go for it. It was quite the zoo. (17-1)
>
> We basically need to teach teachers how to be a team because we have always had such a high degree of autonomy and we've always been in our own little classroom doing our own little thing. . . . as a staff, forty of us will get along because it's easy to get along with someone you never see, right? It's more difficult when you have to be in that person's face five and a half hours a day. (4-5)

Formal Activities

The in-service opportunities that had been specifically provided were identified as having had a variety of focuses. In terms of building team skills, efforts directed specifically at that tended to be incorporated into school wide in-service activities. Many of these activities were part of regularly scheduled staff meetings:

> Before we made our first attempt with the grade sevens, we had at staff meetings, on several occasions, team building exercises and certainly discussion of the middle school concept. One of the things that I remember is dividing up in a group and making our chart of suggestions as to what can be done to work in group. They were all put together and we priorized them. (13-2)

The school also held annual day-long retreats which focussed on a particular theme. A major part of the program for two of these recent retreats has been directed at team building activities. Responses to the success of these activities varied:

> We've had some retreats. In fact, the title of one was "the team's the theme" and it dealt almost exclusively with that. (12-2)

> In retreat we built a lot as a team. We did team activities in retreat as a team and I think that helped. (3-2)

> In our last retreat we had a couple of gals from Calgary come in and do a half day workshop on conflict resolution. It was very interesting, but in a way it was kind of like learning to use paragraphing before you'd ever had any experience with paragraphing. (4-5)

Other planned professional development opportunities were also identified by a number of participants. Again these varied in terms of purpose and perceived effectiveness. Regarding the question as to what had been done to develop a team approach or team skills, teacher responses included:

> The district attempted to get us in that direction, but it was for all the teachers, so it wasn't school specific. (6-2)
>
> That very first district day that we had several years ago when we had a guest speaker from California, and that's another thing that bugs me. We had a guest speaker from California and we went to visit a school in Swift Current that had been doing it for fourteen years. Team teaching, team approach, they didn't have to fly in someone from California to tell you how great it is. (5-3)

Another form of in-service option experienced by the original members of the first grade seven team and by the grade eight team, and generally found to be valuable to them, was the opportunity to observe an existing middle school in operation. Accessing this opportunity had provided team development for them as well as furnishing them with a broader understanding of middle school operation:

> Before we started teaching as a team, in June of 1992, we were able to head to Swift Current, as the four of us, to see the school in operation there, to see the structure of their teams. I felt that helped develop a cohesiveness and a bond. (9-2)
>
> We were given the opportunity to go to Swift Current to see a team in action, in a school in action with full podding. That was excellent for us. We had two days we had to spend, you know a night there and being together and talking about it, and being there first hand was an excellent team building situation, not only professionally, but just personally. (15-2)

Further options, over an extended period of time, tended to be broader in scope and not necessarily limited to team building and collaboration specifically. These opportunities included visiting other middle schools, developing and meeting individual team PD goals, participating in district wide offerings on middle schools, attending a locally planned provincial conference on middle schools, developing team to team presentations and taking advantage of appropriate committee membership opportunities. Although these options were often broader in scope, some teachers still saw them as opportunities for learning about collaboration:

> I guess what changed it all for me was I went to the National Middle School Conference down in Portland . . . before I went my attitude was this middle school, teaming, pod thing is a fad . . . and I came back with a whole new attitude saying 'Man, I've got to get on board.' (12-2)

> I think there have been a lot of inservices, like in the October inservice there were a lot of sessions on teaming and interdisciplinary units. So I think they are trying. I think more could be done, but everything takes so much time. (3-3)

When questioned about the provision of in-service on team building skills, a number of participants felt that opportunities had been limited and that their development as teams were not necessarily principally a result of such opportunities:

> We've just evolved. There's been no formal development or in-servicing in that regard at all. It's just kind of evolved. (10-2)

> We've done other in-services, but as a group I guess we haven't really looked within and identified our own strengths and weaknesses. We've kind of, I think, come to know what they are. (9-2)

Surfaced as the basis for some negative reaction was the fact that over the extended period of time during which teams had formed, evolved, or team changed in personnel, the access to inservice opportunities and the timeliness of specific opportunities had not be consistent:

> It would be my feeling that if you were going to do conflict resolution and have the main objectives of the team and how to team teach and so on -- that all should have been done as the team was forming, not five years after the fact. (4-5)

Two final approaches to in-service were ones that were closely linked to the school's administration. First, the administration made a point of regularly passing on published materials on middle schools and teaming to the team leaders, sharing some materials at team leader meetings, placing pertinent articles in a binder for staff perusal, and sharing key points from a variety of sources in a weekly newsletter to all staff. Interestingly, in all of the interviews, the provision of these materials was mentioned only twice.

The second approach was a requirement by administration that teams set goals for the year and that team leaders were responsible for two in-service sessions related to those goals. "I also expect team leaders to do two inservices,whether they do them or whether they organize them, they don't have to be the ones (1-7). Again, there was little direct reference to these in the interviews.

Informal Activities

Informal team building activities and meetings outside of school were also regarded as valuable for team development, but too infrequent, for a number of those interviewed. These activities, which might not be considered as in-service or professional development activities by many, ranged from team meetings with a specific purpose to team gatherings which were often more social in nature:

> One of the things that we did was work together to set our goals for PD as a team and also our goals for development of projects. (7-3)

> We just chatted a little bit about what we thought would happen and just brainstormed some things we thought teaming would be and we thought our team could be. Then during the summer we met twice . . . we talked about the specific directions we wanted to go. (16-2)

> We started it all off by during the summer we got together in August and we had a barbecue over at our team leader's house. We all just chatted and got together with spouses and everything. It was really nice just to break the ice, and just to learn a few things about one another. (15-1)

> Today we're going out for lunch together as a team. We've had in the summer just before kick off -- where we meet at the leader's house for a barbecue and we've gone out for supper. If we are doing something like

> supervising for the concert, then perhaps just before that we'll meet as a team and then go as a group. (6-5)

Chapter Summary

Meaningful in-service has been identified as possessing the potential to have significant positive effect on the development of collaborative teacher teams. The focus, content and design of that in-service, the manner of delivery, the extent of access to it, and teacher belief in its importance and relevance all impact on that effectiveness. In this study, formal in-service as a factor by itself having had an influence on the building of teacher collaboration could not readily be considered as having had a significant impact. Rather the composition of the team, the personal characteristics of team members, informal activities and a number of other factors combined with planned in-servicing brought about a move towards a team approach.

Chapter 8

FINDINGS: PERSONAL BENEFIT AS A FACTOR INFLUENCING TEACHER COLLABORATION

Many of the participants, when first asked the question, "What causes collaboration or team work to happen on your team?" had some difficulty identifying a specific factor and often provided answers requiring further reflection and clarification:

> I guess the camaraderie that evolves over time and the teachers' knowledge that teamwork works so much better . . . and just to see the end results of our efforts. We know that it's a good idea. (10-2)
>
> I wonder if it just boils down to our personalities . . . I think possibly it's just the professionalism of the teachers on the team. (6-9)
>
> Everyone on our team is a very amicable person and easy going, yet has a lot of heart in determining what kids should be getting as far as a kid's education goes. (15-2)

These teachers and several of the others involved in this study often had a tendency to first identify the more concrete factors, such as common meeting and planning time, as those most significant in facilitating collaboration. When questioned further, their answers began to corroborate the research findings indicating "personal gain" as being a key to maintaining involvement in collaborative ventures.

Reduced Sense of Isolation

One of the personal gains that many felt was a reduced sense of isolation. Teaching by its very nature has, for many, been a profession where the teacher often works in the relative confines of his or her classroom, with limited peer contact. Those team members interviewed expressed that this indeed had frequently been the case for them in previous non-teamed teaching assignments:

> I felt, being just in the language arts department, somewhat isolated. I did language arts and that was it. (6-5)
>
> Even though I was in a school where there were two teachers to each grade, I was on my own. I didn't have help from the other teacher. No support, no teaming, no ideas flowing, no sharing, no nothing. (11-1)
>
> In the other system I felt so isolated, you know, this is just my problem sort of thing, or if I'm doing something with my class, does anyone else really care or know about it? Is what I'm doing – is this a good thing for the kids, etc? (5-5)

In contrast to this sense of isolation teachers saw a team approach offering the opportunity for an expanded supportive environment:

> I think it's the idea that four heads are better than one, that four people have a lot more ideas than just one, and of course you get a lot more support working as a team than working by yourself. (11-1)
>
> Certainly the support for doing special activities. It's really hard to go on a grand scale and do full integration of the different subject areas when you don't have other bodies to split up the chores with or other ideas. (10-3)
>
> Part of a teaching group, a professional team. Somebody to bounce ideas off, some friendships, and collegiality. You're not alone. You're part of a team and if you're having a bad day, it's not just you with a class. (9-3)
>
> Teamwork is essential. I taught the kids a new word in French today. It's called stressé, which means stressed out. And this profession, I've had many difficult professions, this is the most difficult, continually stressful. By spending time with colleagues to work together, my stress load has been reduced. (7-10)

Increased Understanding, Trust and Respect

Such a supportive environment was not spontaneous in its creation.

Rather, this sense of team and collegial collaboration developed over a period of time as, in most cases, deeper understanding, trust and respect for one another evolved:

> You have a better understanding of what's going on in everybody's discipline. So you have more empathy for other classes, other disciplines. (12-7)
>
> One thing that I have found interesting is discussing student problems with other teachers and finding out how much is a personality thing with me and a kid, or how much is consistent throughout. And different strategies and things that work. Or different pressure points or things that drive me nuts that don't bug anybody else and vice versa. I think that's a real learning experience. (14-8)
>
> The other thing that has been really neat is that the personalities on our particular team are very different and it's been really enjoyable for me to see how we have developed our skills and learned how to work with each other and have also learned how to recognize each other's strengths. So I can say, 'This is what I'd like to do, but you're really good at organizing such and such. Do you see any problems or do you see anything else I have to think about?' (7-2)
>
> We know our strengths. We don't have to get over the barrier of 'Oh, will that hurt their feelings?' We can actually say to each other, 'Does that tick you off?' or 'Did I tick you off by doing this?' and then we can say, 'No.' (15-10)
>
> For sure, the understanding that everyone's ideas have merit and that nobody's ideas are criticized whatsoever. Some of them are goofy. I mean we all recognize that. We have a good laugh over them or whatever, but there's the understanding that everyone's ideas have merit and everyone is treated with dignity and respect. (4-16)
>
> Sometimes you will go into a team or a situation and you will think, 'Gee, this person, like you, might not agree,' or you might think they teach a different style. And then on the team you learn there are good things about that style too and you learn about the person, so there is a building that way. (3-4)
>
> There were two of my team members that I didn't really care for when we got together. It's been great. There's been an opportunity to get to know them professionally and socially, much better than just seeing them in one or two instances that were really high profile. (16-8)

Improved Communication

With a new sense of trust came a more open communication where both negatives and positives could be surfaced:

> The communication is very important. If you're having a problem, you're teaching something that's not working, you can go to your team members and find out how they're doing it, share expertise in those areas . . . that's a big plus. (17-5)

> It is important that it is a venting period, but it's important to make sure that we don't spend all of the time venting. (7-2)

The benefits of the communication shared though participation on a team also included more practical components, often going beyond the team itself. Whether it was awareness of what students were studying in another class, necessary timetable accommodations, or joint communiques to students or parents, team focussed and generated communications were regarded as beneficial to successful day to day operation:

> It's also for information sharing, so that team members know approximately what's happening in other courses in terms of generally what topics are being discussed, what kind of work load is occurring in the different courses, so there can be a little bit of sharing. (7-2)

> We sit down for instance and say, 'I'll phone so and so, you phone so and so.' Then we come back and share. So more parents are phoned and there's better contact. (13-4)

> When I have a student in Phys Ed who needs to be talked to or needs to be patted on the back, it's a lot easier to do because you just go to the team leader and say 'Look, this kid needs a pick me up, can you do something for him in classes, because this happened or whatever.' Then boom, right away it's all done instead of me having to find four other core teachers and talk to them. So the line of communication regarding a student is very established, very quick to gain access to. (12-6)

Collaborative communication was also related to the sharing of the teams' tasks, labors, and resources:

> The big plus to me for team is a sense of sharing the load, which means planning, supervision, frustration and all things. It's everything that you're supposed to do in terms of collegiality and working together in a school so you're building community. (7-5)

> It is really important for us all to follow up on what we say we're going to do . . . knowing that you have someone else to cover for you and knowing they won't mind, it all works out in the end. (14-1)

> If I have a bunch of kids that miss homework on a particular day and I'm busy that day after school, I know there's somebody there that's going to follow up with those kids . . . and the other teachers are aware why the kids are in that room. (5-5)

Communication, sharing and dealing with issues such as student discipline, interdisciplinary units, scheduling, and personal preferences all had potential for disagreement. However, few expressed the feeling that their independence or individuality had been threatened or that their ideas were not valued. Rather, they felt:

> Maybe a little bit sometimes, but for the most part it's been quite amicable. We're all quite flexible. We can say give up a period at one time for somebody else to do a special activity or exam . . . but you know others will give you one back. I think there's a lot of flexibility in the things that we do. (9-3)

> In some ways, but not ones that really get into my personal way of teaching. When you're in your classroom, you're still yourself. You don't really have to change anything that way. (15-5)

One teacher did however bring up the idea that perhaps compromise could be more like submission for some teachers:

> Like, being with it right from the beginning, I don't feel it imposes upon me, because if I don't feel comfortable with something, I can usually speak against it and work out a compromise. However, someone new coming into the team, I feel, would feel pressure to conform, you know, and not rock the boat. (17-4)

Conflict Resolution

Conflict, with the exception of one team, was not generally evident and appeared to be resolved with few formalities:

> If you don't work well with the people you are teamed with and if there is a real personality conflict, that could be a problem, but being on this kind of my third team, I haven't found a real problem there. (3-2)

> We've worked out kind of unwritten rules and problems that have come up, we've discussed them. (10-2)

> Not really because we do have to be flexible. . . . we are very open with one another if we feel something isn't working we'll say it and then maybe someone else was thinking that and was too polite and then lo and behold we start manoeuvring and getting new ideas. (6-8)

> We haven't really found that there's a big problem. When there's been something we disagree on, we find a way just to work around it. (15-2)

Although not overtly stated, the issue of a kind of on-going discord surfaced regarding the workings of one team. In observing team meetings, when conducting interviews of members of that team, and when subsequently analyzing those interviews, underlying differences were evident. To examine this issue, further analysis of all of the interviews conducted and responses to a question asking about the downsides or problems of teaming was undertaken. It was concluded that there was only one team that indicated unanimously that the biggest potential negative to teaming was personal or philosophical conflicts:

> Miscommunication, not seeing the whole is more important than one, lack of sharing. (11-3)

> For me it's the constraint . . . I felt I couldn't blow my nose without getting team approval to do that and that is just so against who I am . . . I want to have some control over what I do and what I teach and how I teach it, without having to get team approval. (4-10)

> There's a downside if you are not a team player and if you have someone on your team that's not a team player, then it can cause tension . . . I mean sure if there's a personality conflict it's tough, because it's always there. (10-4)

> I think when people are not compromising and insisting on their idea. That causes conflict. When people are fairly rigid with their ideas and they don't want to give a little. (17-6)

As outlined earlier in the section on "Setting and Participants" (Chapter 4), the history of this team has been varied and not without change and resulting problems. This history might well have added to any tensions that existed at the time of the study.

Collaboration With Non-Team Teachers

The final emerging element related to the theme of personal gain was that of the collaboration among those on teams and those not on teams and the question of whether the principles and practices of collaboration developed within a team extended beyond the team. Non-team members fell into a variety of categories. First were those core subject teachers who were not on teams. Next were those core subject team members of other teams. Finally there were those non-core subject teachers who taught students in the various pods but who were not members of a specific team.

Administration had a very strong belief and commitment to collaboration both in and beyond teams. In reference to the teams that were in place, the administration of the school felt that they should communicate with one another:

> I am underscoring the importance of networking between themselves. This is important. The last thing you want, in my estimation, is this team over here on a pedestal and the other one not. (1-8)

> I'll say, 'OK, share time. What are you doing that will be of interest to the rest?'. . . So we go around to the team leaders and share some of the things that they are working on. (1-12)

Administration was also aware that a form of unintentional competition might evolve:

> I think when you have more than one group it's a built-in factor to promote better results. You know, one group does not want to appear as the other is doing all good the work and they are not doing any. (1-9)

To provide some peer connection for all teachers, administration had in place a number of arrangements. For those core subject teachers who were not yet members of a core subject team there was a subject department affiliation. This affiliation also existed for core subject teachers who were on teams. For those who were in the option subject areas, administration created an options department, encouraged them to get involved in interdisciplinary units, and encouraged the four core subject teams to invite their participation in these units.

What the administration desired and what occurred were not necessarily the same. First there were those core subject teachers who had applied for a team position but were not placed on a team. Although none of these were interviewed, those who were interviewed had opinions as to their feelings:

> Yes, they are saying 'Is there something wrong that I am not going to be on a team ?' (2-3)

> There are so many teachers who aren't on teams, who teach grade nine for instance. Or only the eights, only half the eights are on teams, so there's enough teachers who aren't on teams. It hasn't been a problem. (5-4)

Next there was team-to-team communication. As outlined earlier, there were two teams only at the grade seven level. The perceptions of the communication between those two teams differed considerably. Team leaders felt that the communication links were adequate:

> I would say a fair amount. Early in the year there was some dialogue between leaders and we tried to work on some common policy. Some we were successful, some we went our own way. (9-3)

> We do it very informally. I talk to their team leader regularly, but very informally. . . . We share what we're doing and we will invite them to take part if it'll fit, which rarely it does . . . we make every effort to at least share our plans. (16-4)

Some other members of those teams felt otherwise:

> They're separate. They run in their own fashion. (7-4)

> We've been doing this for a couple of years. We're kind of set. We've got certain routines that we've set up and the other team have sometimes borrowed from that, sometimes bombed. . . . As far as getting together and doing things as a whole grade seven, we haven't done anything really. (5-4)

The communication that most frequently occurred between teams was among those teachers who taught the same subject:

> She and I have been talking constantly about what we are doing. We've shared some planning and lessons and speakers coming in for different units. (15-3)

> What was nice for us is that on the Japan unit, which is always a major unit for grade seven, the three grade seven Social Studies teachers got together. We spent quite a bit of time sharing information and we also spent some time sharing information on our Japan Days. (7-4)

Communication and collaboration between teams and option subject teachers again varied in terms of attitudes and perceived possibilities. Many teamed teachers felt that it was a concern and generally agreed that it was something that should be addressed:

> I think at times they definitely feel like they're left out. Like you definitely hear comments like, 'Well, I was never told about that.' I think there is -- I don't know what word could describe it -- definitely just a feeling of left out I think, and not having the support. (14-3)

> I suppose, to go back, that's one of the things that's a downer on it. We just haven't taken into consideration all of the option people. (13-4)

> I think that's been a problem. . . . Are they just appendages that drift about needlessly or aimlessly? How will we as a team include and facilitate the teaching and learning of our students, who are being taught by options people? (4-9)

Others felt that there was no need to rush the situation. Still others felt that efforts that had been made were adequate or that it would not be all that easy to facilitate:

> I think sometimes they do feel like they are left out or I feel like we are leaving them out, but I think it is a step at a time. It is a big enough battle to have gotten all four subjects together before we get seven together. (3-3)

> The only time we've used options is in the one big interdisciplinary unit that we've just completed. . . . But other than that we haven't been able to bring them in yet. We'd sure like to. We've talked about it. But it just seemed easier because of the four teachers with four classes and they are off teaching grade six through nine. (6-3)

> They're pretty well isolated because they're teaching other subjects. They're not a part of our meetings. I mean, if we run special field trips, we'll tell them. Once in a while we get together, you know, 'So and so's been acting up this way. Have you noticed anything about him?' You know there's been communication, but they're not part of our team. (10-3)

Part of the seemingly low key effort at collaboration with option teachers seemed to be based on an attitude that some of those teachers did not seem too enthusiastic about the idea:

> Non-team members are saying, 'Fine, I'll continue doing what I'm doing because it doesn't effect me whatsoever' or they are making a real concerted effort to become part of it or a real concerted effort to avoid it. (16-4)

> They feel that they should be included in some activities that go on, but I think that they are comfortable being removed a bit in terms of being able to stay within their options. (2-3)

> Well, there are some people who I've heard voice the opinion that they don't want to be part of that at all. 'Let me do my own little thing and let

> me be' . . . I like it a lot, but I know there are some people who aren't interested at all. (8-4)

A few recognized that teams were sometimes remiss in leadership and that they could take more action to cause a higher level of collaboration with option teachers:

> But we kind of take the responsibility of filling them in on what we're doing. Sometimes we're good at it, sometimes we're not. (11-3)
>
> Well, that has been something we've sort of struggled a bit with . . . it doesn't seem we're able to incorporate them, probably just because we don't make a real effort to get them involved. (17-4)

Although this variety of opinions existed, acknowledgment was made that some successful collaborative ventures involving option teachers in interdisciplinary curriculum had occurred and were still growing. For example, in a unit on Japan, the Home Economics teacher, the Art teacher and the Physical Education teacher had been involved.

One of the reasons for that involvement was the comfort level of the core teachers with the unit, as it has been reworked for a number of years. Another reason was a strong push by the physical education department to become a part of as many interdisciplinary units as they could handle:

> It didn't last year, but I was aggressive this year and went out . . . I've got to get on board . . . and somehow I've got to get Phys Ed involved because I saw so many benefits to the kids. (12-2)
>
> And for me one of the frustrating things last year was we would have a group come up with something and I would go to someone and say 'Hey that's a great unit. Why didn't you let us know?' 'Oh well, we didn't think physical education would be able to tie in.' So this year I came to them and said 'OK, that's a problem. How can we fix that?' 'Look this year physical education wants to be involved. Don't assume with yourselves that physical education can't fit in. We're the experts in physical education. We'll find a way to fit in.' And they've come to us this year. (12-3)

> Then it's on our plate and the ball in our court. What are you going to do? They don't press us and they don't say 'Well, what are your plans. What are you going to do?' (12-4)

Related to the idea of the various collaborative possibilities beyond the team itself was a question concerning possible competition between the teams or the establishment of mini cultures at the expense of a school culture. Responses indicated it was a concern but one that hadn't yet materialized:

> It could be divisive, but I don't think that in our school it really is, right now. Even our grade eight pod relates to our grade seven pod for ideas. (15-3)

> I've felt that it could happen. I really haven't experienced that this year though. I really thought it would happen at the grade seven level, because it was us and them in terms of a division. We haven't seen that at all, which has been very pleasing. (16-4)

Another concern was one voiced by a team member who taught an option subject in addition to a core subject. Her reflections on the need for shared communication between the teams and non-team members pointed out a situation which could cause misunderstanding and tensions.

> There's a lot of informal communication that happens at team meetings. But because everybody is there it doesn't even register particularly with anyone to write it down so that anybody else can find out about it. And this is was what I've run into with my contact with some of the other teams. Because they're so intensely part of their team, they forget that what they do impacts other people. (7-4)

Chapter Summary

A sense of growing collaborative effort brought to many team members the understanding that, not only was there team benefit, there was also individual teacher gain to be had from a team approach. A diminished feeling of isolation and a mutually experienced increase in both personal and professional understanding, trust and respect were among such gains. With these came an improvement in communication and a means to reduce the potential for conflict.

With the strengthening of teams came a realization that, although some steps had been taken, there was still need to further extend collaboration to a school level as opposed to somewhat limiting it to the team units.

Chapter 9

FINDINGS: TEACHER EFFICACY AS A FACTOR INFLUENCING TEACHER COLLABORATION

The literature review identified enhanced teacher efficacy as a factor fostering on-going teacher collaboration. That same research, although defining efficacy, did not expand significantly upon some of the many components that could be considered part of the professional growth and practice implicit with that efficacy.

Teacher efficacy could be considered to include both teacher growth and consequential student growth. This study of collaboration identified a number of elements related to both of these aspects.

Teacher Growth

A first element contributing to an expanded teacher efficacy was the increased level of information that teaming provided to the teachers. Particularly important was an enhanced understanding of the curriculum presented to students in subject areas other than the ones they were teaching:

> It's given me a lot of awareness of what the other subjects teach. I had very little idea unless I found the textbooks lying around. (14-3)
>
> I did Language Arts and that was it . . . and this way I'm really getting to know the grade seven Math curriculum, Science curriculum and Social Studies curriculum. (6-5)

This expanded knowledge was shared with students and, where appropriate, incorporated and reinforced:

> So I can say to the kids, 'I know what you're doing in Science, I know what you're doing in Math.' So it just makes them a little more accountable for what's going on. (8-1)

> I give her my science unit outlines with the vocabulary and she tries to use the vocabulary in her spelling units and the kids come in and tell me the bonus word was fulcrum or something from science. They like that or appreciate that. (14-4)

Other benefits were also related to this increased curriculum consciousness. Clarification of incorrect assumptions regarding student skills occurred:

> I assumed in Science they knew how to do formulas and I was way above their heads. I was manipulating a formula and they didn't even know what a formula was. So you make those assumptions and you lose the class . . . so then you talk to the math teacher and you find out you have made the wrong assumptions. I think with teaming those assumptions could be worked out a lot quicker. (3-11)

There was also a realization that certain curricular components tended to be repeated in a variety of subjects and through communication and coordination emphasis could be designated to one subject, with support from others. Such an approach saved time and avoided negative student response to unnecessary repetition:

> So that's the third slap at the cat these kids are getting. We couldn't figure out how come they were so bored with this unit. Now all of a sudden we realize that's what's going on. So next year we're dropping that. We don't need to teach it anymore. So there's less duplication for teachers which means the kids are going to be more interested in what you're teaching. (12-7)

> I know before, when I was teaching the effects of smoking, I would be talking about the respiratory system and the circulatory system and whoever was teaching that portion of Health was doing identically the same thing. Good review, but sometimes it's not necessary. (6-8)

The participants also expressed gratitude for alternative teaching approaches and strategies drawn from their peers:

> You know she's got some great ideas and that really helped me a lot. We got together one Sunday afternoon at a restaurant and drank coffee for about five hours. You know she would say something and then, 'Wait a

> minute that gives me an idea!' And I think because of the varied interests of the group one person's ideas spark another person's ideas, so we get a whole panorama of ideas rather than a narrow view. (8-4)

> The opportunity to share regularly with your colleagues and to share a group of students with which we can work and share what we do with those students, and share some of the strategies that we have, the strengths we have, the weaknesses. I've learned a lot from my fellow team members. (16-7)

In turn that shared knowledge frequently motivated thinking about one's own teaching:

> I think it makes you sit down and do much better planning than you would if you were simply bombing along on your own. You have to consider what other people are doing and where they are going. (13-3)

> Professionally you can build on and utilize other people's strengths and improve yourself as a teacher. (9-4)

> Spending time with other teachers can really help you to reflect on your own work and it really reinforces what you're doing well and what you need to change. And for me personally that's most important. (7-9)

The area of teacher growth was also addressed by the participants when they shared their feelings regarding interdisciplinary curriculum. An examination of the experiences encountered during the collaborative planning and teaching of interdisciplinary curriculum units, which frequently provided opportunities to interact with students outside of traditional classroom configurations, led teachers to express satisfaction with the fact that students were often able to see teachers differently and, from the teachers' perspective, more positively:

> They have access to other teachers in other fashions. For example, they got to see me making and playing drums. And that's something I don't really do in Social Studies class. (7-8)

> I think they see teachers in a different light too. You know just because you are a Science teacher doesn't mean you don't have other interests or strengths or ways to help. (5-10)

> So, when we teach everybody else's thing or we all teach the same thing, they look at us more as people and they don't just look at us in that one room or that one area of life. (15-7)

In addition, the teachers saw the students differently and more positively during interdisciplinary units:

> Also seeing the kids in a different light. . . . So I could see a kid that was really good artistically or writing essays or building something and see them in a much different light that just in the math classroom where they might be having a problem. . . . Seeing their whole development, not just in one specific area . . . and instead of pigeon holing kids on what their ability is, you can see them in a wider range of activities. (5-5)

> I think one of the biggest advantages is getting to know the students better. I feel that I really know these kids because I deal with them not only in my class, and we get together in a whole pod from time to time, and the kids get to see you in a different way, like in a fun type of thing and we get to see them outside of sitting in their desk and doing an assignment or whatever stuff they have to do. (8-4)

A final positive element associated with interdisciplinary curriculum units was the acknowledgment of the enjoyment experienced by the teachers and the importance of that enjoyment to teaching:

> Because they are fun. You get to teach in a different way. Because it expands the way that you teach. . . . Because if your students are learning and having fun learning it is a lot easier to teach. . . . When you do interdisciplinary units, they are kind of fun and I think it is important to have some fun, to do some things that are a little out of the ordinary. (3-10)

A part of that enjoyment may also have been due to the fact that there was also an indication that there had been positive parent reaction to interdisciplinary curricular units:

> We had so many people through our Japan displays in both the ancillary and the library, especially the library because it was set up for that. . . . there was just a steady stream of parents and good comments. (6-9)

Student Growth

Student growth, both in the affective sense and the cognitive sense, was a major focus at team meetings. The discussions and decisions from these meetings and their eventual application were frequently identified as being important to the teachers and to the students concerned:

> If you take a non-team group of kids, there is no one sitting there for two or three hours a week discussing kids and how they're performing. They just go. So we're not just discussing it, we're doing something about it. That brings results. (13-3)
>
> This is our opportunity . . . we spend three quarters of our time talking about the kids and their problems and how we can help them and what common things we can do to help prevent a problem and help them to see success. So we're doing the same thing. (15-2)
>
> I really think that the biggest advantage to this teaming idea is that I always used to see kids kind of slip through the system and you get frustrated with the kid and they go to language arts and the other teacher would get frustrated with them, but you'd never have any time to coordinate what was going on. Usually you felt like you were the problem, or you never seemed to have the time to dedicate to that kid and follow up. But at least in a team you can identify those kids . . . and there's much more follow up on students. I think it's much more difficult for them to just kind of slide through the system. (5-1)
>
> Sometimes just by sharing how students behave in the different classes, we get a better sense of what's happening for them . . . For me that's been the major benefit. It's not just, "Oh I don't know how to deal with this student. It's been, 'This is what is working, this isn't, does anybody else have any other ideas?' So that sharing has been really good for alleviating stress. (7-2)

From a behavioural perspective, both proactive and reactive collaborative decisions were made. To reduce the possibility of interruptions, to save time, and to establish more effective learning situations, teachers shared information on such things as plans for up-coming activities and effective seating arrangements and worked to coordinate assignments, tests, and exams:

> An awareness of what the kids are doing in all classes and being able to spread out tests and assignments so the kids aren't swamped, so they can do their best work on several things instead of just one thing. (14-7)
>
> We listen to each other and we pick up things sooner than we would on our own. Behaviours that we should pick up and things that we can do to correct it. (13-3)

In making these decisions, consistency of approach was viewed as important for the students being taught by a team of teachers and for the teachers themselves:

> We can be consistent in the way we teach them, the way we evaluate them, and the things that we expect from them in terms of behaviour, preparedness, the way homework is done, and also in the way we're going to treat a kid's problem. . . . The kids benefit so much more. It's not like they're changing atmospheres going from class to class. They're just changing personalities at the front of the room. (15-4)
>
> The consistency with discipline. We talk about it and we try to be consistent in all of our classes so that the students don't expect one thing from one teacher, move to another class and a whole different set of things. (6-4)
>
> It's very good to have that consistency among classes so parents feel comfortable with what is happening in Johnny's class is the same as another student across the hall in terms of all the different things that happen, like management or materials, or discipline or expectations. (17-10)

This collaboratively developed approach for dealing with students appeared to impact on teachers' feelings of commitment to that approach and to the team in general:

> I have one non-pod grade eight and three pod classes and I find I'm probably more consistent in the pod classes because I know we have common expectations and if I don't follow through I'm letting the rest of the team down. . . . I think what I have found about being on a team is that it has given me more ownership into the kids and that when you know you're meeting and discussing problems and you hear from different points of view, you really feel like a lot more responsibility in following through and communicating with parents and kids. (14-2)

> I was worried at first. I thought I didn't really know how to teach by myself, let alone teach in a team, because I had only done it for one year. But this has helped me so much . . . and I know that if I wasn't part of a pod some other time, it would certainly help how I dealt with kids, because I'd still go and talk to their teacher and make sure there was common knowledge on how we treated them. (15-5)

In terms of the collaboratively planned and taught interdisciplinary units, teachers recognized that the enjoyment that they sensed was also experienced by their students, motivated them and was important to their learning:

> They like it because they're [units] very interesting and they think it's something else other than what you're supposed to be doing. So they're learning and they don't really realize that they're learning. (11-6)

> The kids loved it. . . . They were very positive. They wished that there had been more time spent on it. We were really mixed up, like a lot of variety in the activities that we did, and they liked the creativity things we did. They really enjoyed it. (14-7)

> I think it gets us away from the normal teaching and it allows the kids to take ownership on a project, because it's something they really have to research, or they have to do something different than the norm, and they can run with it and that makes it special. . . . Something they really like is when we mix the classes together so that one group might split up, like yesterday we had all four groups mixed together. And they love that, they love the change. (15-8)

> Right now you should hear the kids talking back and forth. We haven't started this but they're already talking about it. And you don't hear them talking about other school academic things. So there's certainly a motivational factor. I think it's something they're going to look back for a long time and say 'Remember when we did that.' (13-7)

Interdisciplinary curriculum was also viewed by teachers as having other strong benefits for their students. In particular was the idea that integration of curriculum allowed for a linking of materials and an increased perspective of relevance that were crucial to learning:

> And it makes them realize that life isn't just Science, Social, LA and Math. Life is all mixed together and they all intertwine and intermingle. (15-7)

> I think that it just bridges the gaps between subject areas. It makes links for the children's learning because it crosses the different curriculums. (10-7)
>
> The kids start to think in an integrated fashion, which I think is really important. They start to make jumps. . . . The creative jumps kids make are the kinds of things, I think, that will stick with them for the rest of their lives. (7-8)
>
> I think the big plus if for the kids. And that's an opportunity for them to see that there's some crossover, some practicality, and some application opportunity in terms of what they are being taught. When they're being taught something in Math, it's not Math specific necessarily. (16-7)
>
> And it's just like the idea of using teams to build a sense of community, you use interdisciplinary units to build a sense of integration. I think that's really important for kids at this time in the world. (7-5)

Chapter Summary

An analysis of effective teaching recognizes the importance of both teacher and student growth. Both of these areas underwent perceived positive change as a result of team member involvement in a number of collaborative endeavours. Expanded knowledge in terms of curriculum and alternative strategies and a resultant rethinking of previous practices were recognized by the teachers. Also seen as positive to many were the new ways that teachers and students saw each other and the additional pleasures gained from teaching.

From the teachers' perspective students also gained further, both cognitively and affectively, from collaborative teacher effort. A consistent and committed approach to students was seen as a result of working together. Also identified from ventures into interdisciplinary curriculum were lessons that were both enjoyable and relevant to students.

Chapter 10

FINDINGS: TWO FURTHER FACTORS FACTORS INFLUENCING TEACHER COLLABORATION

This study also identified some other minor factors, not identified in the literature review, that were seen to encourage the implementation and maintenance of a collaborative or team approach: common teaching space and school size.

Common Space

One factor identified by the team members was the idea of a common physical area, shared by team members, that allowed for close proximity and frequent informal communication:

> Another thing that helps too is classrooms in a common part of the school. It makes it quite easy just to walk down the hallway to talk to people, before and during school. (9-7)
>
> We have our regular meetings and with the three of us being up there side by side, almost between periods, every period, we're talking about something to do with cartooning [an interdisciplinary unit]. (13-8)
>
> We could not do that sort of thing [on-going communication] without being fairly close together. (10-6)
>
> Before I would be in with the Science teachers, whereas here I have a Math and Language Arts teacher right across the hall so when you are talking the incidental conversations come up because you are not segregated by subject. I think that helps. . . . With the grade six team we were all in the same hallway and we talked in the hallway a lot and that was kind of our morning meeting. (3-11)
>
> It is really valuable to all be in the same physical area of the school. . . . We have very valuable interactions and dialogue. Just because we are in the same location, we have the opportunities and that really helps. When some are removed, it makes it very difficult for that to happen. (16-5)

School Size

Another element surfaced by the participants was a belief that teaming and a collaborative approach had worked better in their school because of a large enrolment and the resultant staffing. In a high enrolment school, it was felt that it would more likely be possible to provide teachers with an assignment that limited the degree to which they would have multiple focusses. There was also seen to be a greater opportunity to design a timetable that allowed for all team members to be free at the same time. Although these beliefs were not always reflected in realities of the study school, they were still felt more likely to be achievable there than in smaller middle schools.

> I think it would be more challenging in a smaller enrolment school. . . . What I have seen elsewhere in the district is the same teacher being part of many teams. I can't see that being as effective or productive. Certainly our enrolment helps us that way. It can accommodate you for one subject area. (9-8)

> This school is unique in a sense that it is large enough that it can accommodate interdisciplinary planning. . . . They are not going to have a true middle school in any of the other schools because they are too small and their staff will be too stretched out. (2-1)

Chapter Summary

Two lesser elements identified as possibly influencing the implementation and maintenance of a collaborative approach in a middle school were the proximity of team members to one another and the number of students and the resulting number of teachers who might be involved in teaming.

Chapter 11

CONCERNS, QUESTIONS AND IMPLICATIONS

Change

In this case the establishment of middle school interdisciplinary teams meant significant change for the study school and a large percentage of its staff. The resultant modifications and adjustments often resulted in satisfaction for some and challenges for others. Eventually instrumental in moderating much of the transitional trauma, and suggesting a positive outcome from the change being experienced, was the emergence and acceptance of a collaborative approach by the interdisciplinary teams.

As suggested, the team collaboration that unfolded and continued to evolve was the result of a complex interplay amongst diverse factors, both tangible and intangible in form. There were factors the presence of which might have encouraged initial collaboration. There were factors which appeared to increase the maintenance of a collaborative approach once it had been established. There were also those factors which were the fruits of collaborative efforts that tended to feed back to the teachers and teams and to reaffirm and expand the process even further.

Those factors that encouraged collaboration for some brought questions for others. The personalities involved and affected could interpret each circumstance and each step differently. Emotions and experience could cloud perspectives in terms of what was good and what was bad for oneself, one's students, and one's peers. What might have been considered as critical in a certain situation, with certain personalities, and at a given time, might have been less significant in another instance. In the end, such a major and relatively rapid change in educational philosophy and approach, not surprisingly, saw varying degrees of support and implementation.

A more collaborative approach, involving all stakeholders and allowing for early input from all of those who would be affected, would likely have been a better starting point for this educational change than the perceived top down manner that had been utilized. Such an approach might have better provided for the opportunity to examine more thoroughly the reasons for the change and its perceived benefits. It might also have better accommodated the need to ask questions, to refocus and make changes along the way, to establish communication channels that would be less inclined to erode over a period of time, and to clearly demonstrate and confirm administrative support at all levels.

Although the implementation of middle school interdisciplinary teams, in this case, might have taken into account some of these further considerations, the overall impression that still surfaced was that the teachers generally supported and were supported by a middle school interdisciplinary team approach.

Such feelings did not come by chance. In order to diminish the concerns associated with the change, a number of important steps, as outlined in Chapter 4, had been taken to answer questions, to alleviate problems, and to build an on-going base of support from those directly affected by the change. Although the overall outcome, in terms of implementation, appeared to be what had largely been desired, much of that achievement must acknowledge the determination, commitment and competence of those teachers and the administrators directly involved at the school level.

Although this study indicated that teachers, working as part of a team, recognized the benefits of such a collaborative approach and generally remained committed to it, there were questions and concerns that suggested the continued maintenance of that support and the future of a team approach were not necessarily givens. Related to these questions and concerns were several implications, both from the perspective of practice and research.

Time

Time, acknowledged by many in terms of its positive benefits for teaming, still remained a major focus for teachers' concerns. Time was viewed from two perspectives: a need to give more of one's time and the need for common meeting and planning time.

Feeling that a middle school core interdisciplinary team approach took extra time, a number of teachers expressed some concerns regarding the possibility of eventual "burnout" for those involved:

> I think that teachers feel that already they're loaded down and struggling to get through curriculum and feeling that they have to do extras. (14-7)

Although there was a frequent and strong emphasis made by teachers about the demands on their time and a need for more time, there did not appear to be any significant recognition that an interdisciplinary team approach also saved them time. Although such possible timesavers as a reduced number of courses to prepare lessons for, a sharing of the teaching load during interdisciplinary units, an apparent reduction in the time needed for classroom management related tasks, and the sharing of a variety of other tasks were alluded to, only a few teachers actually stated that they could see it as saving time or potentially saving time for them:

> I think there's a more efficient use of a teacher's time. I've been mentioning over and over again about being able to put your finger on

> some difficulties and problems and come up with some learning strategies. Where, if you're on your own, I think you're just going to miss some of those things. (13-4)

A few also seemed to recognize that perhaps they might often be the ones creating the extra demands on their time by trying to do too many extras:

> Sometimes I think we try to do too much. (5-6)
>
> I think one thing we discovered, you can get over blown with ideas and then instead of making things easier for the team, you're making things -- you're making your work more difficult instead of using that as a tool to take some of the work away. (17-3)

In reference to this issue, there is little question that the participants were generally giving of their time and of themselves. Further though, it would appear that teachers in such a situation might benefit from a time management program that not only provided for the analysis of the use of their time, but also examined the establishing of priorities from individual, team and school perspectives.

Participants also consistently stated that they needed and strongly favored common preparation and planning time. Their concern for the continued provision of that time, when coupled with a current increased potential for decreased funding to support their wishes, led some teachers to make an outright appeal for a continuation of time allowances in the future:

> Time, because it does take a lot more time. If they give us the prep time, I think we're going to be a lot more committed to it . . . the administration is certainly going to have to stick with us and support the extra prep time. (13-9)
>
> I would advocate that our district try to come up with funding to provide common planning time, essentially adequate staff so that there is common planning time for teams. . . . We're very fortunate to have an allowance to order a half day sub for ourselves and have some planning time. I'd really advocate that that be kept up if possible. (9-8)

In spite of this expressed and legitimate concern for common preparation and planning time, a number of the participants did not yet seem to give the "common" or collective aspect of it as much value as the individual "preparation and planning" component.

> The negative is that it sucks up my time, because you see I have a prep every other day, but one of those has to be spent on team time, and at one point we were meeting a little bit of each prep and it just didn't give me time. (7-5)

Underlying this concern was the whole issue of change. Making the changes inherent with the move towards interdisciplinary curriculum teams did not mean making only those changes that one might want to make or be comfortable with making. Having to change further because of possible economic constraints should not necessarily mean wanting or having to discontinue what you have supported and found to be successful. In this situation, and in many others in education, there is a need for those involved to become more aware of the process of change and to see both the positive and the negative possibilities. There is also the need to make some decisions as to what should and can be done realistically and to act accordingly. We, as teachers, are often our own worst enemies in terms of time available to us. We tend to willingly, and at times unquestioningly, add to what we do and rarely subtract from or modify what we do to maintain a balance.

Related to the many issues of time that came up during the study are some questions that merit further research. First, does an interdisciplinary team approach demand or encourage giving more time in total than the traditionally more independent approach to teaching? Teachers work hard. However, there is an unwritten level of expectation and effort that, if exceeded, would most likely cause most teachers to protest or opt out in some way. This study, although uncovering perceptions that this approach demanded more time of teachers, found few, if any, complaining to the point that they wanted to abandon a team approach.

A second related research question deals with what effect a decrease in or the elimination of common meeting and planning time would have on teacher commitment to a collaborative interdisciplinary team approach. Teachers spoke often of the need for that common time yet, as pointed out, they were not necessarily using the majority of the time available for common team purposes. If common time were reduced or eliminated, would the routines, planning processes, sharing strategies and successes now in place be seen as enough to sustain effective team approaches and/or be sufficiently motivating to support a continuation of a team approach?

A third series of related questions surfaced during the interviews, when there were some concerns expressed regarding the consequences of having part time members on a team. To what extent is having part time team members potentially detrimental to team effectiveness? Are there some areas significantly affected by virtue of a person being part time? What strategies might be employed to allow for the maintenance of a part time option for some teachers and yet diminish full time team member concerns?

Limitations of Teaching Assignment

A second form of “burnout” identified by those interviewed was one perceived to be associated with teaching a limited selection of courses over an extended period of time. Those who expressed this concern identified it as possibly reducing personal interest in their teaching but they did not think that it would negatively effect the functioning of their team. Although this was a factor more identified by those who had been primarily teaching in the subject based junior high grades, it was not exclusive to them:

> I wanted to switch from grade six because, doing it for four years, I thought if I didn't change now I might get stuck in a rut and didn't want that to happen. (3-1)

> As far as downsides, one downside could be some repetition. If you have three or four classes of a subject, you might find yourself repeating the same lesson over during the day and I suppose you're locked into one grade of kids. (9-4)

> We were thinking, the rest of us, one more year at this grade level. Not necessarily working together, that didn't bother us, but at that grade level doing the same thing four times a day, and it's really hard teaching something four times a day. (15-10)

Although it is not uncommon for teachers to teach a single grade or a limited number of preparations over a period of time or, for that matter, to request it as a preference in terms of a teaching assignment, the very fact that the issue surfaced adds it to those factors that need to be considered when implementing middle school interdisciplinary teams. In this case, the school's administration reduced the likelihood of repetitive teaching assignments having a detrimental effect on teaming by being receptive to requests for grade and team level transfers. In addition, there was a general view by the teachers themselves that, in spite of a teaching the same courses repeatedly, their growth as a team, the awareness of new strategies, and their tendency to continually revise curriculum in the interdisciplinary units kept them fresh. When asked if this was a major concern, two teachers commented:

> Oh, no. We're getting more and more ideas and knowing each other. We know our strengths. If there's something more artistic to do, I'll do that or they leave it for me to do, or if there's something to do like working with the public, we give it to him. He will do that. We know our strengths. (15-10)

> No, because we have changed it so much. I mean this is our third revised edition and we have changed it to adapt to our situations this year. (11-7)

Team Cohesion

Overall the merits of teaming were supported and the teachers believed that, once a team had evolved into a cohesive entity, it would likely stay intact for an extended period of time. Only one teacher expressed a different viewpoint:

> I think after that time [3-4 years] there's potentially two destructive things that can happen. One are just the personal relationships that go on. You just get tired of each other. (16-7)

Although this opinion was the only example voiced regarding this concern, it does however raise the question as to whether there is a norm in terms of the life expectancy of a team. It also suggests further research to compare the effective life span and collaborative level of those teams that are composed of volunteers and those that may have participants who were not necessarily volunteers. It also implies that team building and analysis of team processes should be on-going in nature and not just addressed in the formative stages.

Further related concerns were surfaced regarding the potential of problems for teams as they stayed together longer and established their own particular identities. The first of these uncertainties dealt with a feeling that there was the possibility for the development of competitive mini-cultures or a collection of isolated teams in the school. Although this concern did not yet reflect a reality, it was nevertheless an issue, both to the principal, who stated, "I am dealing with the whole community here -- kids from six to eight -- I don't want to have thirty different islands so to speak. I want a blended community . . . I don't want thirty ghettos. . ." (1-9), and to some team members:

> Just that when it first started I was really concerned that the pods would become -- it would splinter the staff and that hasn't really happened. So that was a kind of false alarm that went off in my head. (12-6)

> I feel very much that there is a concern about competition amongst the groups, so I think that's something that you'll be really careful not to have. You don't really want one group to try one upmanship the other group, which I've seen happen, which is not in the best interests of the staff morale and that kind of thing. So as being two separate groups I think we're going to have to be careful to communicate openly with each other. (17-5)

These concerns again brought out some of the sensitive aspects that may accompany a move towards teaming, aspects that have to be dealt with to bring about honest collaboration. Contact with former associates may be diminished. Cliques, existing or not, may be perceived as such. Conflict between loyalty to team or to school may arise. Beneath it all is the myriad of emotions associated with what may be seen as forms of competition.

These concerns also suggest further research, as does the examination of what mechanisms might be considered to allow for the maintenance of a school culture and to develop effective communication and interaction between teams and between teams and non-team members.

A final issue regarding cohesion was one concerning teams that had been together for an extended period of time. Here there was an uncertainty regarding the potential of developing a closeness or rapport where the line between professional and personal became unclear. In the past, this situation had become a reality for one team and with it came complications:

> You don't realize -- you become so close that sometimes you overstep the boundaries of what would be appropriate to say to somebody -- I mean something that you may say jokingly to somebody may hurt their feelings because of the repartee that's developed. (10-8)

> At some points, it did get excessive. Yeah, it did in our behaviour towards each other. Sometimes it did get excessive and we had to -- that's where our team leader was very successful at saying, 'Whoa here. Let's start doing the task. Let's be professional about this.' (11-8)

> I think sometimes in teams -- we've really seen an interesting kind of evolvement in our teams -- because our first team was very close, close to the point that there were a few good rows -- because you know we worked so closely together. And then when I went away last year and we had a substitute come in and a new member on the team. It's really changed the dynamics of the team. And it's interesting because the teams change, the dynamics change and how we all interrelate changes. (10-7)

These results reinforce the importance to the individual of his or her feelings, the importance of the team leader in maintaining a professional focus, and the need to provide proper training in those skills necessary for team development, operation, maintenance and change.

Related to this need was an expressed feeling that once a team had been close and had worked well together, changes in team membership could mean a rebuilding process or the possibility that continuing members might be hesitant to accept new members.

Team Selection

This concern was closely related to the process used to select team members. Although administration had full control of the composition of teams, had reasons for the placement of teachers on teams, and had experienced few personality conflicts on teams, there were still those who wondered whether specific teacher preferences might not have a more significant part in the composition of teams:

> I think it would work better than just having administration say, 'You're going to work with you and you and you.' Especially if they've all been existing teachers in that school and so they all know one another. (11-8)

> And so we didn't choose, so that might be one thing that might make it a little more difficult for some people. I don't have a problem with any of the people that I'm in a pod with, but I don't know if any of them have a problem with me or not. So in some cases that might make it more

> difficult if you don't get to choose who you want to work with. If I know I can really get along with person A, B, and C, I might have an easier time working in close relationships with those three people rather than randomly pulled off of the staff. (8-3)

In relation to this topic the principal stated, "Indirectly I have heard the heard the latter [preferences for whom they would like to work with], but not formally. It's been great and I think it shows some maturity" (1-5).

Again this appears to be an area for further research. To what extent should administrators seek staff input on team membership or involve existing team members in the selection or interviewing of replacement team members ? To what extent are teacher formulated teams used and how effective are they? Are there other methods of team selection that could be employed? What are they and what merits and drawbacks do they have?

Team Leader Selection

Unlike the selection of team members, the participants did not express any significant concerns regarding the selection of team leaders. For some, as discussed earlier, there was either a lack of interest in the position or a lack of knowledge regarding the whole process. Others had reached an opinion as to why teams should not likely be involved in the selection of a leader:

> No, the administration does [make the decision] and I think that's just as well because then there's no animosity at the team level if I voted for somebody else and not for that person. . . . Besides with a team of four you are always going to get an all or nothing or a split and that's just not right, and how do I feel coming into the team knowing that three of the four members voted against me as a team leader? No, I mean it's better this way. (4-8)

Reducing the likelihood of the selection of team leaders becoming an issue was the treatment by administration of those who applied but were unsuccessful in their bid. All applicants were spoken to after the appointments were announced and the successful ones were made aware of others on their team who had applied and encouraged to utilize their skills. On the other hand, the fact that team leader was a two-year position, but likely extending to four, might frustrate some aspirants to the position.

Also related to the topic of team leaders was the question of appropriate skills to lead in the development and maintenance of a collaborative team. Who should make such a decision? What skills would be considered necessary and suitable? Should team leaders be assessed solely in terms of these skills? How can these skills best be developed in team leaders? Should there be an on-going development process? How can newly appointed team leaders be brought up to a strong level of competence in a short time? These questions imply follow-up for both research and practice.

As a final comment on this topic, considering either the lack of participant opinion or the fact that there were such a variety of opinions with reference to both the selection of team members and team leaders and other related topics, it would seem that what was communicated about the selection processes and how it was communicated could both be areas for consideration for practice.

Extending the Team Approach

Also related to the idea of team cohesion and effectiveness was the whole idea of who should be on teams. Past team successes and the desire to maintain gained positive elements were addressed when teachers spoke about the uncertainty of a future which would see a move to full teaming of interdisciplinary core curriculum teachers. Their concerns were two fold in nature. A first issue was that of voluntary participation:

> But I don't know if it's actually voluntary in this school either, because he's wanting to team everybody. So how voluntary is that? (10-4)
>
> But there is a common understanding that come next year as many people as the principal can get podded will be podded. (12-1)

The second point was an expressed belief that some teachers were not in favor of teaming and that, although they may be good teachers in their own right, placement on a team could be detrimental both to an individual and to a team:

> Well, there are some people who I've heard voice the opinion that they don't want to be part of that at all. 'Let me do my own thing and let me be.' Some people feel that being part of a team is diminishing what they're doing on their own. (8-4)
>
> I think there are even teachers here who are very uncomfortable with the idea of podding and teaming . . . because they inherently don't like change. It doesn't mean that they are not effective teachers and they don't recognize teaming as an effective way of teaching. It is just a shift in paradigm for them and such a shift that it causes so much internal noise, if you will, that it's something that they don't like to do because none of us likes to have our balloon or equilibrium upset. We like to have things go the way they've always gone. (4-6)
>
> One thing that pops to mind. I'm just really curious about next year when everybody has a pod. I'm interested to see how many people will get so frustrated they'll just kill and how many people can just run with it. (15-9)

All of these issues have research implications in terms of what constitutes the most effective manner to establish teams and what training or other options can be provided for those teachers less inclined to work collaboratively with others.

Another issue for consideration is the fact that three of the four teams were composed of teachers who volunteered to be on a team. Does such a preference hint that they were more likely to be comfortable as team players and had certain skills already developed as opposed to those who did not volunteer to be team members?

In-Service

Closely tied to this idea of skills was the entire issue of in-servicing or professional development. Although there had been a number of in-service opportunities offered to the participants in this study, access to them appeared to vary and depended upon a number of factors. When the team was formed had a bearing on in-service opportunities. The grade six team formed before any major commitment appeared to have been made towards teaming. As a result they had few early opportunities for in-service focussed on team building. Being the first team to form at a grade level appeared to help in the case of the grade seven teams. They had opportunities not made available to the grade six team or the grade seven team that formed the following year.

Priorities of various groups or individuals also had an impact in terms of whether in-service opportunities were made available, whether a decision was made to access them and whether funding support was possible. For instance, team leaders appeared to have more opportunity than did team members.

A last factor was the initiative of individual teachers themselves. Given equal opportunity did not mean equal utilization of the opportunities.

Although it may have existed at some time in the past, there did not appear to be a focussed, long term in-service plan in place at the time of the study. Although the teams were required to develop individualized annual in-service plans that became part of the year's priorities that the school made public, mention of the sharing of these plans or any consideration regarding common needs and possible professional development solutions was not readily evident.

Although the teachers recognized that the various forms of in-servicing had influenced the development of their collaborative skills and a team approach, there was a general feeling expressed that this impact had not been significant. The fact that this influence was not given significant credit by them could be an issue for further examination. How had they defined in-service to themselves? How much influence did they think they had on what qualified as in-service? To what extent had they accessed what was available? How had they expressed their satisfaction or dissatisfaction with what had been offered?

Additional research might also be considered to examine some other questions related to in-service. What is appropriate in-servicing for implementing and maintaining an interdisciplinary team approach to teaching? Do most teachers already possess many of the skills needed for effective collaboration? Is there a need for team building skills? Who should determine such an in-service program? Who should plan and deliver the program? Who should the recipients be? Is there an optimum time and process for delivery? To what degree might a program differ for volunteer team members as opposed to those compelled to participate on teams? What part can experienced teams play in providing assistance to newly formed teams? How long should in-service continue?

Leadership Support

Part of the uncertainty regarding in-service may have had something to do with the degree of perceived leadership support and direction for the changes taking place. Although the school's administration was recognized as being supportive of teaming and, as identified, taking steps to provide information and in-service opportunities, a few teachers may have interpreted what appeared to be a low level of on-going direct involvement with the teams as indicating a lack of specific direction as opposed to an opportunity to grow as needed. This again underscores the importance of establishing a system of clear, on-going communication.

A significantly higher number of the teachers felt that, over a period of time, they had been largely ignored or forgotten by district level administration. This was particularly evident in those teachers who had not been around when the initial addressing of middle schools and teaming had been instituted and had been accompanied with corresponding outward support. With the virtual disappearance of middle school steering committees at the district level at the end of the 1993 school year, any perception of meaningful district support including encouragement of communication among the middle schools was also seen to have waned.

Considering the teacher attitudes that were surfaced, further research focussing on effective district and in-school identification, implementation and maintenance of support for desired educational change would appear to be warranted. Again, closely related to this is the idea of communication. Who creates the message, what the intended message is, who the messenger is, how the message is delivered and how the message is received are all important links in the communication chain.

Teacher Efficacy

Although efficacy was recognized by the participants as one of, if not the most powerful factor for encouraging continued collaboration, it appeared to come as an unexpected, albeit, significant reward. When the teachers began as middle school interdisciplinary team members, who could have told them what they would actually experience? The growth that they recognized was individual and reflected their respective backgrounds, past experience and the interrelationships that developed with their team partners and the students in their pod. Although the resultant growth was acknowledged, it still was seen largely as an unforeseen bonus.

That bonus was most closely tied to the participants' perceptions that their students were generally both cognitively and affectively better off as a result of being taught by a middle school interdisciplinary team, as opposed to being taught in a more traditional junior high school configuration. This attitude relates well to the contention of those whose research has concluded that "regardless of teaching level, most teachers define their success in terms of their pupils' behaviors and activities rather than in terms of themselves or other criteria" (Hartootunian and Yargar, cited in Guskey, 1986, p. 6).

Further embedded in this perspective of increased efficacy was concurrence for the research and "A Model of the Process of Teacher Change" developed by Thomas Guskey, in which he stated "Whatever the case. . . significant change in the beliefs and attitudes of teachers is contingent on their gaining evidence of change in the learning outcomes of their students" (1986, p. 7).

Related to Guskey's findings may be the relatively strong degree of success of the teams in spite of limited, related in-service. In essence, "we learn by doing." Guskey reiterated this for teachers and shifts they might make when he stated, ". . . that change is a learning process for teachers that is developmental and primarily experientially based" (1986, p. 7).

These ideas would appear to support the premise that successful teams evolved and various forms of teacher efficacy developed extensively as a result of teachers experiencing membership on collaborative middle school interdisciplinary teams. Further study would be appropriate to confirm this speculation and to analyze the whole process of staff development, when introducing change such as the move towards middle schools and teaming, in the district in which the study took place. Has the approach of the past, where often those who would be in the forefront of change were exposed in detail to the why, but not actually experiencing the what and the how until later, really been recognized as less effective? Is the plea for school-based in-service winning out over district determined activities? What is the relative value of theory and of practice for increased teacher efficacy?

Interdisciplinary Curriculum

This element, as explained earlier, appeared to be one of the major educationally beneficial longer term payoffs of effective teamwork on collaborative middle school interdisciplinary teacher teams. It also brought delight to many of those involved, both teachers and students. However, like the other discussed elements, the planning and teaching of interdisciplinary curriculum, even on a relatively limited basis, was not without concerns and questions.

From the perspective of efficacy was the issue of straying from curricular relevance. Teacher opinion was not unanimous as to whether this was a problem or not:

> No, they really don't take away from the curriculum as much as they take away the focus of one subject and put more focus on another one. (11-6)

> And I think you have to be careful not to do add-ons, to do things that are part of the curriculum, not tangents because there's a real concern -- pressure to complete the curriculum within the time line. (9-5)

> I guess sometimes you do units, you do a lot of, I don't want to call then frivolous things but, things that may not be directly related to the curriculum. Lots of optional activities. And I suppose you could be wasting -- and I use that by wasting valuable time -- you know -- and not covering necessarily A, B, and C in the curriculum. I don't see that as a problem. (10-7)
>
> I think you have to be really careful when you do them that they aren't add-ons, that they teach curriculum. Because if they are add-ons on the curriculum they are sapping your time. But if you are teaching your curriculum through this, then it is okay because you are achieving your goals. (3-8)

Another concern, related by one teacher, was that although an interdisciplinary curricular approach was enjoyable for both teachers and students, that very student enjoyment might also have a negative effect:

> People must set certain limits on themselves so they don't burn themselves out through these grand experiences. The fact is that kids still need to learn their times tables. They still need to do their seatwork. (7-10)
>
> By the time they've had a wonderful educational experience with me and with another teacher and another teacher through the year they become immune to the wonderfulness and the daily grind doesn't occur and there are some benefits to the daily grind. (7-8)

Here again we may be caught in the transitional trap or 'we've always done in that way' or 'the curriculum is the engine of education'. Is there not a challenge for us to make learning enjoyable both for the students and for ourselves? When we analyze the curriculum that we are responsible for teaching, do we not have some leeway and should we not ask, 'How much should quantity really be the driver?' These are questions that are often easier to ask than to answer, and the answer must be personal.

As with the whole concept of collaborative teaming, teachers felt that an interdisciplinary approach to curriculum was significantly more likely to take place if common meeting and planning time was made available to them. To support this stated need they pointed to the significant use of team meeting time for discussion of curriculum and related topics, in particular the planning, implementation, and evaluation of interdisciplinary curriculum units:

> A lot of them are used for planning interdisciplinary units. (3-2)
>
> The cartooning unit that we're working on right now, we have spent quite a bit of time on that, ploughing though it. (13-1)
>
> We help each other a lot with the planning of units, if we're going to do interdisciplinary or whatever. (8-1)
>
> The children get benefits too when you have the time in our team meetings to prepare IDU's [interdisciplinary units] and integration. (10-2)
>
> What we do on on-going, in terms of evaluating the project or interdisciplinary unit, we will take some of our common meeting time and we will talk about how it's going and we'll formally talk about it and evaluate it and look at and do an interim modification or adjustments. (16-6)
>
> We follow up by marking all the projects. We mark them together, kind of set up a prime period where there would be at least three team members together when marking any project and that mark goes towards their social studies mark, but all of us are involved in evaluation. (5-9)

Interdisciplinary teaching units were also related to what teachers described as effective use of their time. Individual or team perception of the possibilities of such units, the prime benefactors of the interdisciplinary units, and other current demands on the teachers had an impact on whether these units were viewed as timesavers or timetakers. Those whose curriculum was the main focus of the unit or theme and those whose curriculum was readily incorporated expressed a more positive attitude towards the time used for such units.

A Language Arts teacher who felt he could fit the elements of his curriculum into many places stated, “The way I look at this, I'm not losing any time” (13-8). Another teacher who admitted to the loss of actual time stated, “I just rearranged it and did better than I ever thought of doing before” (14-8). A third teacher, one who modified his curriculum to match the emphasis of an interdisciplinary unit commented, “To me it's an easy trade-off to make. If somebody is going to do something more worthwhile, meaningful and interesting to the kids, I don't mind giving up the time” (9-6). Still another teacher, who other team members acknowledged as giving of time during interdisciplinary units and accommodating others, stated:

> I change my focus a little, but I don't change exactly what I'm doing . . . because I need to get through my curriculum . . . I learned to work around it. I mean I've taught it long enough that I know where kids are going to have problems, where we have to spend some time, and the topics that we can do in a day and move quite quickly. (5-7)

In contrast to this viewpoint one teacher commented about his peers, saying, “But, I know I've heard the comment by some other teachers that, ‘We've got to cut it short because I have to teach so much in the curriculum’ ” (17-8)

When asked about the number of interdisciplinary units that a team should do a year, there was agreement that because of time demands there should be some limitation, usually three or four:

> No more than four . . . because it's tough to do as far as scheduling and planning is concerned. They take a long time. (11-6)
>
> No more than three, you could probably do four, but they would have to be reasonably short ones because you do need the time to do just regular stuff too. (17-8)

It even reached the stage in one team where all of the teachers on the team felt other demands on their time were such that a planned interdisciplinary unit and the time requirements that it would entail were too much:

There was one where we all said, ‘We're all too busy right now.’ So we just canned one of them altogether. (15-7)

Another issue that surfaced regarding interdisciplinary curriculum dealt with ownership of the interdisciplinary curriculum units. Although it was felt that the units took a lot of time and effort, this negative was offset by a certain pride of ownership in the final product. When units were not developed from scratch, team identity with it appeared to be at a lower level:

> I think with this unit it will be interesting to see what it is like after a time because I have never taught somebody's unit before. And I think it is a whole process when you go through the whole process of creating the unit and doing it . . . and it is something that you are really proud of and really buy into. (3-9)

> Sometimes you know there is a neat unit being done someplace. You know you can't photocopy it for the whole district, but it would be neat to have a published list of them. 'These are all the interdisciplinary units if you want to try them.' But sometimes that wouldn't work because what worked at their school and with their teachers and situation won't work with yours, but sometimes it just gives ideas.(3-3)

This relatively small issue was reflective of what the research would identify as an early stage perception of interdisciplinary curriculum, one that had not yet really uncovered many of the potentials and pitfalls. What had been done was generally perceived as successful and was also reflective of a fairly consistent agreement amongst the participants as to how interdisciplinary curriculum might be defined.

The opinions and perspectives surfaced regarding interdisciplinary curriculum suggest a number of implications. The range of possibilities goes far beyond what has been developed to this point. The question remains as to how to best expose teachers to those possibilities and whether indeed it is appropriate, at this time, to undertake such an exposure. Perhaps they were aware but, guided by other priorities or feeling restricted by a mandated curriculum, decided that that they could go no further. What should and could be done to assess their feelings and understanding and to expand their approaches to developing interdisciplinary curriculum? When would it be appropriate to do that and would it even be appropriate given the other factors at play?

Chapter Summary

The focus of this research study was those factors that influenced collaboration on middle school interdisciplinary teams. These were surfaced in earlier chapters. This chapter brings forth a number of the participants' and the researcher's concerns, comments, and unanswered questions and also suggests implications for both research and practice. Included are sections on the relationship of change to this subject, revisitations to the topics of time, in-service, teacher efficacy and interdisciplinary curriculum, and a more thorough reexamination of the various elements of the nature of a collaborative team.

Chapter 12

CLOSING THOUGHTS

> It is essentially the experience, the means, that fits human beings not to their external environment so much as one another. Without the cooperation of its members society can not survive and the society of man has survived because the cooperativeness of its members made survival possible . . . it was not an advantageous individual here and there who did so, but the group. In human societies the individuals who are most likely to survive are those who are best enabled to do so by their group.
>
> Ashley Montagu, 1965.

A Concluding View of the Case

The teachers in this case study demonstrated collaborative efforts and growth that they deemed to be important to themselves and more importantly to the students that they taught. Collectively they did not have a common perspective of collaboration, nor were they always necessarily in favour of it. However, recognizing that they were still evolving as teams and as teams within a school culture, the majority seemed to savor the chance to share their successes and problems and to work in a supportive school culture where collegiality and communication were the rule rather than the exception. As their collaborative inter-disciplinary teamwork unfolded, the process was not always ideal, but the teachers gained respect for their peers, appreciated their support and their respective needs, and often found themselves growing both as individuals and as teachers. With that growth came a desire to continue the process and an understanding that "the need for a school's faculty members to reflect on their practice does not end once teachers are trained and programs are established" (Raywid, 1993, p. 30).

In many ways the collaborative processes and practices identified in this study and how they developed reflected existing research, but in other ways they also suggested the need for further research as to those role of those factors in influencing teacher collaboration in interdisciplinary teams at the middle school level. There is a need in particular for further research in those areas where the exisiting research suggested a higher degree of credit to some of the factors than did the participants in this study and also where it questions the depth and focus of teacher collaboration. My observations and the comments of the participants in this study, especially when one considers the relative newness of their endeavours, suggest concerns and actions extending well beyond day-to-day concerns.

Middle school interdisciplinary teams have the potential to contribute significantly to exciting education opportunities for students taught by those teacher teams and for the teachers themselves. That potential is further increased if the teachers have the reasons, the desire, and the skills to work as a team towards common goals that they have had a part in collaboratively formulating and implementing.

Reflections

Ann Lieberman wrote, "We need to understand not only the variety of collaborative activities and arrangements, but what people get from these relationships, and what it takes to sustain them" (1986, p. 6). This inquiry was undertaken to do that. The resultant journey has been fulfilling, both from a personal and a professional perspective.

I am significantly more aware that what may appear to be be superficially simple can, in reality, be intricately complex. Collaboration does not come as a natural consequence of working together in the same school or on the same team. It must be communicated, understood, practised and nourished until it becomes the cement that non-judgmentally blends the simple aspects like brief day-to-day conversations with the complex elements such as the planning, teaching and evaluating of interdisciplinary units, and creates a positive and beneficial harmony. As put succinctly by one of the study's participants, "You can't just put a bunch of people's names on a list and say this is a team" (5-10).

In my experience in collaborative efforts with other teachers, I had taken much for granted in terms of the attitudes and skills held by many of them. I had not naively assumed that all teachers willingly wanted to collaborate. However, I had felt that, shown some payoffs, most would. This is not a given, for what are payoffs to one are not necessarily valued by another. I also felt that teachers had somewhere and somehow developed, at least to a sound functional level, those skills that would assist in the building of collaborative teams. The reality is that these skills are more complex than most of us take for granted, that they are not necessarily a significant part of teacher education or in-service programs, and that individuals vary significantly in terms of the skills they do possess and the desire they have to collaborate.

This study has led me to begin rethinking the whole topic of effective in-service. The need for a very clear, jointly developed focus and effort by all involved is more evident than ever. More importantly, the study has convinced me of the need to allow for a greater emphasis on practice of new concepts and strategies, and some form of downscaling in terms of an early theoretical focus, which has the potential of turning off, dissuading, or unnecessarily troubling those who would likely be most involved.

The concern of the participants for those students whose care had been entrusted to them was most encouraging. Time after time the interests of the students surfaced as the driving force behind what the study's teachers would do or would consider doing. In a time when public education seems under a relentless attack in terms of lacking focus or care, the teachers in this study and their concern for their charges offered evidence to the contrary.

Also of positive note was a reconfirmation and extension of my personal belief that in collaboration exists many new or enhanced possibilities for those in the teaching profession and for the students of those teachers. Combining the knowledge and experience of teachers resulted in a sounder and often more appealing curriculum and in a more effective affective managing of the students. These types of results lend strong support for the recent plea of Mary Anne Raywid, who stated, "ultimately a change must occur in both public and professional conceptions about teacher productivity – that it is only in the classroom with students that the 'rubber meets the road'" (1993, p. 34).

Collaboration cannot be considered another bandwagon passing by, another quick cure, or another fad to be dismissed. It must be recognized for what it can do and be given the opportunity to do that. Successful teacher collaboration also has the potential to be extended to involve all stakeholders and ultimately make education more of a public and powerful process.

In closing, I am mindful of the fact that this journey is a quest that never really ends. There is still much more to be discovered and shared with others. In that sharing I would hope that both I and they may better know and experience the possibilities of collaboration and understand too the Chinese proverb that declares, "Of the best leaders, when he is gone, they will say: We did it ourselves."

BIBLIOGRAPHY

References

Alexander, W. M., & George, P. S. (1981). The exemplary middle school. Chicago: Holt Rinehart & Winston.

Arhar, J. M., Johnston, J. H., & Markle, G. C. (1988). The effects of teaming and other collaborative arrangements. Middle School Journal, 19, 22-25.

Berg, B. L. (1989). Qualitative research methods for the social sciences. Needham Heights, MA: Allyn & Bacon.

Blomquist, R., Bornstein, S., Fink, G., Michaud, R., Oja, S. N., & Smulyan, L. (1986). Action research on change in schools: The relationship between teacher moral / job satisfaction and organizational changes in a junior high school. (Report no.81-0040) Washington, DC: National Institute of Education.

Brady, L. (1985). The supportiveness of the principal in school-based curriculum development. Journal of Curriculum Studies, 17, 95-97.

Caldwell, S. D., & Wood, F. H. (1992). Breaking ground in restructuring. Educational Leadership, 50, 41-44.

Clark, C. M., & Yinger, R. J. (1977). Research on teacher thinking. Curriculum Inquiry, 279-304.

Cohen, E. G. (1981). Sociology looks at team teaching. Research in Sociology of Education and Educational Socialization, 163-193.

Drake, S. M. (1993). Planning integrated curriculum: The call to adventure. Alexandria, VA: ASCD.

Elias, M.J., & Branden-Muller, L.R. (1994). Social and life skills development during the middle school years: An emerging perspective. Middle School Journal, 25, 3-7.

Ellis, N. E. (1990). Collaborative interaction for improvement of teaching. Teaching and Teacher Education, 264-275.

Fullan, M. G. (1991). The new meaning of educational change (2nd ed.). Toronto: OISE Press.

George, P.S. (1984). Middle school instructional organization: An emerging consensus. In J. H. Loonsbury (Ed.), Perspectives on middle school education (pp. 52-67). Colombus, OH: National Middle School Association.

George, P. S., & Oldaker, L. L. (1985). Evidence for the middle school. Colombus, OH: National Middle School Association.

George, P. S., Stevenson, C., Thomason, J., & Beane, J. (1992). The middle school -- and beyond. Alexandria, VA: ASCD.

Glesne, C., & Peshkin, A. (1992). Becoming qualitative researchers: An introduction. White Plains, N.Y: Longmans.

Guskey, Thomas R. (1986). Staff development and the process of change. Educational Researcher, 15, 5-12.

Hawthorne, R. D. (1990). Analyzing school-based collaborative curriculum decision making. Journal of Curriculum and Supervision, 279-286.

Jacobs, H. H. (Ed.). (1989). Interdisciplinary curriculum: Design and implementation. Alexandria, VA: ASCD.

Johnston, J. H., Markle, G. C., & Arhar, J. M. (1988). Cooperation, collaboration, and the professional development of teachers. Middle School Journal, 19, 28-32.

Kasten, K. L., Short, P. M., & Jarmin, H. (1989). Self managing groups and the professional lives of teachers: A case study. The Urban Review, 21, 63-79.

Kessler, R. (1992). Shared decision making works. Educational Leadership, 50, 36-38.

Lake, S. (1989). Interdisciplinary team organization in the middle level school: Practioner's monograph #7. Sacramento, CA: California League of Middle Schools.

Lieberman, A. (1986). Collaborative work. Educational Leadership, 43, 4-8.

Lieberman, A. (1988). Building a professional culture in schools. New York: Teachers College Press.

Lieberman, A. (1988). Expanding the leadership team. Educational Leadership, 45, 4-8.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage Publications.

Lipsitz, J. (1984). Successful schools for young adolescents. New Brunswick, N.J: Transaction Books.

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. Teachers College Record, 509-536.

Little, J. W., & Bird, T. (1984). Report on a pilot study of school level collegial teaming. (Contract no. 400-83-0003). Washington D.C: National Institute of Education.

MacIver, D. J. (1990). Meeting the needs of young adolescents: Advisory groups, interdisciplinary teaching teams, and school transition programs. Phi Delta Kappan, 71, 458-464.

Maeroff, G. I. (1993). Building teams to rebuild schools. Phi Delta Kappan, 512-519.

Merenbloom, E. Y. (1986). The team process in the middle school: A handbook for teachers (2nd ed.) . Colombus, OH: National Middle School Assoc.

Merriam, S. B. (1988). Case study research in education: A qualitative approach. San Fransisco: Jossey-Bass.

Plodzik, K. T., & George, P. (1989). Interdisciplinary team organization. Middle School Journal, 20, 15-17.

Raywid, M.A. (1993). Finding time for collaboration. Educational Leadership, 51, 30-34.

Rosenholtz, S. (1985). Political myths about education reform: Lessons from research on teaching. Phi Delta Kappan, 349-355.

Rosenholtz, S. J. (1991). Teachers' workplace: The social organization of schools. New York: Teachers College Press.

Sarason, S. B. (1982). The culture of the school and the problem of change. Boston: Allyn and Bacon.

Sarason, S. B. (1990). The predictable failure of educational reform: Can we change the course before it's too late? San Fransisco: Jossey Bass.

Seidman, I. E. (1991). Interviewing as qualitative research. New York: Teachers College Press.

Shaw, C. C. (1993). A content analysis of teacher talk during middle school team meetings. Research In Middle Level Education, 17 , 27-43.

Spradley, J. P. (1980). Participant observation. New York: Holt Rinehart & Winston.

Young, J. H. (1989). Teacher interest in curriculum committees: What factors are involved? Journal of Curriculum Studies, 363-376.

Additional Readings

Beane, J. (1991). The middle school: The natural home of integrated curriculum. Educational Leadership, 49, 9-13.

Ben-Peretz, M. (1980). Teachers' role in curriculum development: An alternative approach. Canadian Journal of Education, 2, 52-62.

Corbett, H. D., & D'Amico, J. J. (1986). No more heroes: Creating systems to support change. Educational Leadership, 44, 70-72.

Dickinson, T. S. (1989). Creating a humane environment: Teaming in the middle school. In Focus, 17, 16-19.

Erb, T. O. (1987). What team organization can do for teachers. Middle School Journal, 18, 3-7.

Erb, T. O., & Doda, N. M. (1989). Team organization: promises, practices, and possibilities. Washington, DC: NEA.

Fullan, M. (1982). The meaning of educational change. Toronto: OISE.

Knight, P. (1985). The practice of school-based curriculum development. Journal of Curriculum Studies, 17, 37-48.

Larson, C. E., & LaFasto, F. M. J. (1989). Teamwork: What must go right / what can't go wrong. Newbury Park, CA: Sage Publications.

Leggett, D., & Hoyle, S. (1987). Preparing teachers for collaboration. Educational Leadership, 45, 58-63.

Lieberman, A. (1973). The power of the principal: Research findings. In C.M. Culver & G.J. Hoban (Eds.). The power to change: Issues for the innovative educator. New York: McGraw Hill.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Education Research Journal, 325-340.

McKenna, B. (1989). Whatever happened to team teaching? American Educator, 13, 15-19.

Schmoker, M. J., & Wilson, R. B. (1993). Total quality education: Profiles of schools that demonstrate the power of Deming's management principles. Bloomington: Phi Delta Kappa.

Sigurdson, S. E. (1982). Two years on the block plan: Meeting the needs of junior high school students. (Final Report). Edmonton, AB: Department of Education, Planning & Research Branch & the Edmonton Public School Board.

Smith, S. C. (1987). The collaborative school takes shape. Educational Leadership, 45, 4-6.

Vars, G. F. (1991). Integrated curriculum in historical perspective. Educational Leadership, 49, 14-15.

Weber, S. J. (1986). The nature of interviewing. Phenomenolgy and Pedagogy, 45, 65-72.

Wiles, J., & Bondi, J. (1981). The essential middle school. Colombus, OH: Charles E. Merrill.

Zahorik, J. A. (1987). Teachers' collegial interaction: An exploratory study. Elementary School Journal, 385-396.

Appendix A

September 9, 1993

Mr. Duncan Anderson
Box 40, Site 2, R. R. 3
Ponoka, Alberta
T4J 1R3

Dear Mr. Anderson:

Re: Thesis Project

Please be advised that your request to conduct a study in the Public School District is approved. I understand that the individual teachers involved will have the right to refrain from participation.

Thank you for your willingness to engage in this study and involve our district. The findings and conclusions would be of great interest to us.

Best wishes with your project.

Yours truly,

Superintendent of Schools

Appendix B

Informed Consent Form

PROJECT TITLE:	Factors Influencing Teacher Collaboration in Middle School Interdisciplinary Teams
INVESTIGATOR:	Duncan Anderson, B.A., C.Ed. Student, Master of Education Program, Department of Elementary Education, University of Alberta
Supervisor:	Dr. D. Oberg, Associate Professor Department of Elementary Education University of Alberta

This is to certify that I, ______________________, hereby agree to participate in this research project, the purpose of which is to examine the factors which influence teacher collaboration in middle school interdisciplinary teams. I consent to be observed and interviewed by the investigator and to have the interview taped. I understand that the interview tapes will be heard only by the investigator, the staff researcher, and the person transcribing the interview tapes. Anonymity will be maintained.

I understand that I am free to decline to answer any specific questions during the interview, or ask that comments made by me during the team collaboration not be included.

I understand that I have the right to review the observation data and interview transcripts, the analysis of the observation and interview data, and any articles the investigator wishes to publish based on the observations and interviews and delete any information originating from me, if I should so wish.

____
(Signature of Participant)

____
(Date)

____
(Signature of Investigator)

Appendix C

Study Chronology

September 8, 1993 -Submission of letter to School District requesting permission to conduct study.

September 13, 1993 - Meeting with principal to discuss study, request access, and establish parameters.

September 28, 1993 - Submission of Application and Summary of Proposed Research Project to Research Ethics Review Panel.

October 12, 1993 - Approval of Research Ethics Review Application

October 15, 1993 - Explanation of study to Grade 7(1) team.
- Observation of Grade 7(1) team meeting.

October 15, 1993 - Explanation of study to Grade 7(2) team.
- Observation of Grade 7(2) team meeting.

October 16, 1993 - Explanation of study to Grade 6 team.
- Observation of Grade 6 team meeting

November 15, 1993 - Observation of Gr. 7 (1) team meeting and planning session.

November 22, 1993 - Observation of Gr. 7 (2) team meeting and planning session.

December 1, 1993 - Observation of Gr. 6 team meeting and planning session.

January 4, 1994 - Observation of Gr. 7(1) team meeting.

January 4, 1994 - Observation of Gr. 7(2) team meeting.

January 5, 1994 - Observation of Gr. 6 team meeting.

February 14, 1994 - Observation of Gr. 7 (1) team meeting.

February 14, 1994 - Observation of Gr. 7 (2) team meeting.

February 16, 1994 - Observation of Gr. 6 team meeting.

April 12, 1994 - Presentation of thesis proposal.

April 25, 1994 - Interview # 1

April 26, 1994 - Interview # 2
Interview # 3
Interview # 4

April 26, 1994 - Observation of Gr. 7 (2) team meeting.

April 27, 1994 - Interview # 5
Interview # 6
Interview # 7
Interview # 8

April 28, 1994 - Interview # 9
Interview # 10

April 29, 1994 - Interview # 11

May 3, 1994 - Interview # 12

May 4, 1994 - Interview # 13
Interview # 14

May 8, 1994 - Interview # 15
Interview # 16
Interview # 17

May 11, 1994 - Observation of Gr. 7(1) meeting.

January 16, 1995 - Draft copy of thesis to school administrator to check for accuracy regarding description of case and administration specifics.

January 27, 1995 - Draft copy of pertinent pages to interviewed participants to indicate quotes used and context.

February, 3, 1995 - Confirmation by administration as to accuracy regarding case description and administration specifics.

Appendix D

Case Data Base

SCHOOL DOCUMENTS

Aug. 30, 1993 Memorandum to Deputy Superintendent Re School Priorities 1993-94. Subjects: School Priorities 1993-1994, School Advisory Council Goals & Objectives, Measurable Subject/Team Goals, Professional Development, Administrative Priorities, copy of Personal Action Plan distributed for completion to all staff, and form to be used for Administrator's Report

Week #28 - Week of March 28-31, 1994 - Sample of Weekly Staff Bulletin Weekly bulletin containing announcements, recognitions, an article for reading, entitled, "Strength Through Adversity," and the school calendar of activities for the month of May

Form used by Staff to Indicate Teaching Preferences for the Coming Year and Willingness to be on a Team

Timetables of Team Member Participants

Samples of Agendas for Team Planning Meetings

Samples of Interdisciplinary Unit Timetables

Pages 17 & 18 of Faculty Handbook Outlining Role of Team Leaders

Appendix E

Letter to Participants Accompanying Draft Copy Pages

Dear ________________

It seems so long ago that I observed and interviewed you for my thesis research. I guess for many of us it is really a long time. As I reach the last major phase of my efforts (at least I hope that is the case), I feel that is appropriate that I share with you the statements made by you, which I will use in my thesis. With reference to the enclosed, I have provided only those pages where you are quoted. I hope from them you can get an idea of the context but, if the lack of the "whole picture" leaves you with questions or concerns, please feel free to contact me either at school (   ) or at home (   ).

Again, I would like to assure you that in writing the thesis every effort has been made to maintain your anonymity. No names have been used, the school has not been named, nor is (   ) even identified.

The study itself has proven to be a rewarding and challenging experience for me. I was particularly pleased with your willingness to share your perspectives of the many facets of the collaboration of teachers on middle school interdisciplinary teams. As individuals, and as a school, you can be proud of the progress you have made (and continue to make this year), your prime concern for those students that you teach, and of your desire to examine concepts, modify them to your own situation, and to question as appropriate.

Thanks once again for your valued and frank input. I look forward to sharing my completed thesis with you.

Sincerely